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United States Coast Guard

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COMMANDANT INSTRUCTION M4081.12

Subj: OPERATIONAL LOGISTICS SUPPORT PLAN (OLSP) FOR THE 47' MOTOR LIFEBOAT (MLB)

1. PURPOSE. This Manual describes how the 47' Motor Lifeboat (MLB) will be logistically supported during its operational lifetime and is intended for use by all units employing 47' MLBs as well as support activities responsible for maintaining the operational readiness of the platform. Logistics support responsibilities and related support policy support policy are promulgated in this Manual.

2. ACTION. Area and district commanders, commanders of maintenance and logistics commands, commanding officers of headquarters units, assistant commandants for directorates, Chief Counsel, and special staff offices at Headquarters shall ensure adherence to the content of this Manual at all units which operate and/or maintain 47' MLBs. Engineering and Logistics Command will coordinate an Integrated Logistics support Management Team (ILSMT) meeting at least annually to review 47' MLB logistics support policy, including recommendations for changes to this OLSP. Commandant (G-OCS) will promulgate changes as necessary based upon recommendations by the ILSMT.

3. DIRECTIVES AFFECTED. None.

4. CHANGES. Recommendations for changes are reequested from all users of this Manual.

5. POLLUTION PREVENTION (P2) CONSIDERATIONS. Pollution Prevention considerations were examined in the development of this directive and have been determined to be not applicable.

/s/ ERNEST R. RIUTTA
Assistant Commandant for Operations

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CHAPTER 1. INTRODUCTION

A. **General.** The 47' Motor Lifeboat (MLB) fleet is the Coast Guard's primary shore based heavy weather Search and Rescue (SAR) response asset. This document describes the logistics support concepts, organization and facilities in place or planned to provide operational logistics support for these boats.

B. **Revisions.** The Integrated Logistics Support Management Team (ILSMT) as described in Chapter 3 of this plan will review proposed revisions to this plan. Operational commanders and support managers shall forward all suggested Operational Logistics Support Plan (OLSP) changes/revisions to the ELC Standard Boat Platform Manager at the ELC. At least once annually, the ELC (or the Acquisition Logistics Manager during the production phase) shall coordinate and schedule an ILSMT meeting to review proposed changes to the Manual as well as to discuss other support management issues. The ELC will document the results of the meeting, prepare OLSP changes as required and forward to G-OCS for formal approval. G-OCS shall promulgate all OLSP revisions.

C. **Mission Requirements.** Mission requirements and operating characteristics are outlined in the Operational Requirements Document (ORD).

D. **Mission Areas.** The 47' MLB must operate in heavy weather and surf. Inherent to heavy weather and surf operations is the ability to safely transit breaking bars and rough seas to arrive on scene for a timely rescue. The boat must have the speed and power to outmaneuver breaking waves, be self-righting and rugged enough to survive an unavoidable breaker.

E. Operations Concept.

1. **Deployment.** The 47' MLB will operate in all coastal areas, including the Great Lakes, Alaska, Hawaii and Puerto Rico. Several fleet siting studies indicate that 47' MLBs should be assigned in all districts.

2. **Mission Employment.** The primary mission of these boats is heavy weather SAR. Secondary missions include Enforcement of Laws and Treaties (ELT), Recreational Boating Safety (RBS), Marine Environmental Response (MER), and Port Safety and Security (PSS).

3. **Operational Environment.** The 47' MLB has the ability to:

   a. Operate at a minimum top speed of 25 knots (calm sea), 20 knots continuous cruising speed in one-foot seas.

   b. Cruise for a 100NM radius at 20-kt speed with a 10% fuel reserve.

   c. Provide rescue assistance including recovery of personnel from the water, limited fire fighting, de-watering, and towing capability for vessels up to 150 tons.

d. Accurately navigate and effectively communicate offshore during daylight, darkness, and restricted visibility conditions.

e. Be compatible with existing station facilities and billet structure.

F. **Service Life Cycle.** As a ready response resource, an extremely high state of equipment readiness and supply availability must be maintained. Mission readiness is measured by Abstract of Operations data, which determine the average hour available for operations. The design life of at least 25 years is envisioned for the 47' MLB (hull and structure). Commandant (G-OCS) will ensure that logistics considerations include major equipment acquisitions, replacement cycles, spare parts, and consumable materials necessary to support readiness criteria as outlined in the Operational Requirements Document (ORD). The Engineering Logistics Center (ELC) is the primary agent for conducting this analysis and in coordinating its development. Starting in 2009, Ship Structure and Machinery Engineering Boards (SSMEBs) will convene per the Naval Engineering Manual, COMDTINST M9000.6 (series). Their purpose is to estimate remaining service life, determine the need for structural, machinery, habitability and electronics upgrades/replacements and possible service life extension.

CHAPTER 2. SYSTEM DESCRIPTION AND CONCEPTS

A. **General.**

1. **System Operating Components.** The 47' MLBs and all operating and support equipment onboard are system-operating components. These system-operating components are identified in the Boat Class Maintenance Plan (BCMP) Maintenance Support Guide (MSG), and Configuration Management Plus (CMPLUS) when available. Electronics support will be identified in the BCMP.

2. **System Logistics Components.** The 47' MLBs system logistic components consist of the existing shoreside support establishment, as described in this plan. The 47' MLB will make use of these existing facilities. As a standard boat as described in the Naval Engineering Manual, COMDTINST M9000.6 (series); the 47' MLB must be supported in accordance with the prescribed support establishment relationships. These relationships are described in Chapters 3 and 4 of this plan.

B. **System Description.** The design features of the 47' MLB replacement are listed below:

Length Overall (LOA)	47 FT 11 7/8 IN (Add 16" for fendering)
Draft	4 FT 6 IN
Beam	14 FT (Add 16" for fendering)
Displacement	40,000 LBS (Approximate)
Turning Radius	60 FT (Estimated)

Accommodations

Crew	4
Survivors	5

Operating Conditions

Seas	30 FT
Surf	20 FT
Motion/Pitch/Roll	360 Degrees
Wind	50 Knots
Towing Capability	150 Tons

C. **Major Assemblies/Subassemblies.** These are identified in the 47' MLB Boat Class Maintenance Plan (BCMP) enclosure (1).

D. **Logistics Support Concepts.**

1. **Objectives.** The primary logistics support objective is to ensure that the required logistics support elements are in place and maintained throughout the

service life of the 47' MLB. Thereby minimizing life cycle costs and enabling the readiness and safety of the fleet to be maintained in accordance with operational requirements.

2. **Support Environment.** Existing Coast Guard logistics support organizations, procedures and facilities will be used to support the 47' MLBs. The Naval Engineering Manual, COMDTINST M9000.6 (series) describes the tri-level maintenance and logistics support concepts for standard boats.

3. **Logistics Support Improvements.**

   a. Electronic maintenance has been moved to the Electronic Support Detachments (ESDs) relieving the burden on the boat crews.

   b. Management Information for Configuration Allowances (MICA) has been provided to facilitate procurement of spares by combining all HM&E and Electronic equipment into one comprehensive allowance document.

   c. In the very near future, technical manuals will be available in electronic format and incorporated into the Coast Guards Naval Engineering Technical Information Management System (NETIMS), ensuring wide distribution and easier access.

   d. CMPlus, a configuration based supply and maintenance software application that supports the updating and maintaining of baseline data, associated references and replacement materials is being developed for use by 47' MLB stations. CMPlus is an integrated, automated storage and retrieval source for the 47' MLBs inventory, maintenance, requisitioning, configuration management, and equipment demand history information.

   e. A Central Engine Overhaul (CEO) program has been established and is administered by the ELC for the support of the propulsion engines on the 47' MLB. Overhauls of the 47' MLB engines are scheduled to occur every 3000 hours with removal and replacement to coincide with the MLBs bi-annual availability. A support contract has been let by the ELC with a local Detroit Diesel distributor to overhaul the engines returned via the CEO program.

CHAPTER 3. ORGANIZATION AND RESPONSIBILITIES

A. **General.** Responsibility for planning and providing logistics support for the 47' MLBs is widely distributed within the Coast Guard Headquarters and field organizations. Adequate logistics support can only be provided if support problems are identified and brought to the attention of the proper support organization. Station and Group engineering personnel are in the best position to evaluate the support they receive, and therefore have the primary responsibility for identifying deficiencies and reporting them to the proper support organization.

B. **Logistics Support Organization and Responsibilities.** Support planning and execution responsibilities are described as follows:

1. **Station Commanding Officer/Officer in Charge shall**:

   a. Ensure the 47' MLB is maintained in accordance with the Naval Engineering Manual, COMDTINST M9000.6 (series); the 47'MLB PMS Manual, TP3343; and the Boat Class Maintenance Plan. Operate the 47' MLBs within established operational/environmental conditions. Report deviations via the Abstract of Operations report for small boats and the Consolidated Casualty Reporting System (CASREP) to the proper operational and support organization.

   b. Maintain configuration management and a standardized boat configuration in accordance with the Naval Engineering Manual, COMDTINST M9000.6 (series); the Readiness and Standardization Program Manual, COMDTINST M16114.24 (series), and the 47' MLB Operator's Handbook, COMDTINST M16114.25 (series).

   c. Report casualties and material deficiencies in accordance with the Naval Engineering Manual, the Consolidated Casualty Reporting System (CASREP), and the Readiness and Standardization Program Manual to the proper operational and support organizations.

   d. Maintain boat crew training and qualification standards in accordance with the Boat Crew Training Manual, COMDTINST M16114.9 (series) and applicable Qualifications Guides.

   e. Identify/report logistics support problems and bring them to the attention of the chain of command.

2. **Group Commanders shall**:

   a. Provide direct maintenance and supply support to 47' MLBs according to this plan and local instructions. In particular, assist 47' MLBs in performing organizational and intermediate level maintenance as delineated in the

BCMP. Of particular note, Stations are not staffed with EM billets for electrical maintenance support.

b. Provide shore facilities, including space for spare parts, special tools and test equipment, and other logistics support according to this plan.

c. Schedule maintenance periods according to this plan. Report deviations from this plan to the cognizant district.

d. Monitor Boat Abstracts of operation and CASREP messages and respond to deficiencies as appropriate.

e. Endorse all CSMP and BoatAlt requests.

3. **District Commanders shall**:

a. Supervise the support efforts and the operational/maintenance schedules of the Groups and Areas.

b. Budget and manage Accounting Fund Code-30 (AFC-30) operating and maintenance funds for the 47' MLBs and their shore facilities.

c. Assist units with obtaining support and resolving support problems. Coordinate boat repair worklists with the cognizant MLC.

d. Provide small arms and ammunition support as directed by Commandant (G-OPD).

e. Monitor Boat Abstracts and CASREP messages and respond to deficiencies as appropriate.

f. Provide support to the 47' MLBs and their shore facilities as requested by MLCs and Chapter 4 of this plan.

4. **Commanding Officer Electronics Support Units (ESUs) shall**:

a. Provide intermediate level corrective maintenance support through intrinsic expertise or outside technical experts.

b. Budget and manage AFC-42 funds provided for the MLBs.

c. Provide input via the MLC to the BoatAlt process. Manage approved alterations of electronic equipment/installations.

5. **Supervisor of the Electronic Support Detachment (ESD) shall**:

a. Provide primary support for the MLBs electronic communications and navigation systems, as defined in paragraph 4.B.2 of this document and the Electronics Manual, COMDTINST 10550.25 (series).

b. In coordination with the Station CO/OIC schedule and perform all organizational level planned maintenance in accordance with the Coast Guard Planned Maintenance System (CGPMS) Work Schedule Book.

c. In accordance with the appropriate SOP/instructions maintain the required response capability for equipment casualties. Perform all organizational level corrective maintenance. Coordinate with the Electronics Support Unit (ESU) technical assistance outside the capability of the ESD.

d. Budget and manage AFC-30 funds provided for both planned and corrective maintenance.

e. Maintain and update the Management Information for Configuration Allowances (MICA); formerly Electronic Repair Parts Allowance List (ERPAL); spare parts inventory.

f. Maintain and update the Electronic Installation Record (EIR). Maintain and update the CGPMS Work Schedule Book. 6.

6. **Commanding Officers of Naval Engineering Support Units (NESUs)/Civil Engineering Units (CEUs) shall**:

a. Assist the Group Engineer in administering any AFC-45 funded repairs upon direction from the MLC.

b. Support from Maintenance Augmentation Teams (MATs) may be provided at the discretion of the MLC (v) when surplus resources are available above the requirements of the units the MAT was put in place to support. Travel of the MAT in support of the 47' MLB is an AFC-30 responsibility.

c. Request MAT support from the MLC Standard Boat Type Support desk.

7. **Commanders of Maintenance and Logistics Commands shall**:

a. Supervise ISCs and Civil Engineering Units; manage the repair, alteration, maintenance and outfitting of the shore facilities supporting the 47' MLBs. Plan and manage AFC-43 and AC&I funds.

b. Manage the repair, maintenance and approved alterations of electronics equipment installed in the 47' MLBs. Budget and manage AFC-42 funds associated with this, and supervise Electronics Support Detachments (ESDs)/Electronics Support Units (ESUs). Administer electronics equipment repair contracts.

c. Prepare availability specifications and depot level repair contracts as requested by the District Boat Managers. Funding of the resulting contracts is an AFC-30 responsibility.

d. Budget and manage AFC-45 funds for the accomplishment of major Hull, Mechanical and Electrical BoatAlts (in excess of $500 per hull), along with the repair of damage resulting from fire, flood, grounding or collision. Develop repair specifications to correct this damage in accordance with COMDINST M7100.3 (series) (enclosure 2-10), and administer the resulting repair contract.

e. Ensure the safety and environmental health hazards are identified for the abatement through boat repair, maintenance, and alteration program.

8. **Area Commanders shall**: Supervise and, manage the repair, alteration, maintenance and outfitting of the shore facilities supporting the 47' MLBs.

9. **Commanding Officer of the Engineering Logistics Center (ELC) shall**:

a. Perform supply support and engineering activities for HM&E (Hull, Mechanical and Electrical) and Electronic equipment. Including provisioning, allowance development, system stock procurement, cataloging, interservice supply support, inventory management, technical publication and drawing management, Management Information for Configuration Allowances (MICA), conduct technical reviews of all change proposals, and administer and manage the 47' MLB Central Engine Overhaul (CEO) program. The ELC is the ultimate authority for all technical data maintained by the Coast Guard for standard boats and is responsible for maintaining the library for distribution of this data. Technical data includes technical publications, engineering drawings, and other documentation in any media. The ELC Standard Boat Platform Manager will forward any inquiry regarding documentation to the appropriate office.

b. Maintain the Maintenance Support Guide (MSG), and the Boat Class Maintenance Plan (BCMP) for the 47' MLBs.

c. Participate in the configuration control process including the BoatAlt process as defined in the Coast Guard Naval Engineering Manual, COMDTINST M9000.6 (series)

d. Prepare fleet wide standards and instructions for the maintenance of HM&E systems installed in the 47' MLBs.

e. Maintain configuration documentation to support the policy outlined in the Readiness and Standardization Program Manuals and MLB Operator's Handbook.

f. Provide related guidance, standards and specific policies for the Maintenance and Logistics Commands (MLCs).

g. Promulgate, distribute and maintain technical publications as described in Chapter 6.H.4 of this plan.

h. Coordinate and schedule annual ILSMT meeting to discuss 47' MLB support issues and to review proposed changes to the ILSP

10. **Commandant (G-SEN) shall**:

a. Review and approve fleet-wide standards and instructions for maintenance of HM&E systems installed in the 47' MLBs.

b. Participate in the configuration control process including the BoatAlt process as defined in the Coast Guard Naval Engineering Manual, COMDTINST M9000.6 (series).

c. Provide direct assistance to the facility manager in the development of funding models to justify standard funding support levels for the 47' MLBs.

d. Provide assistance to the facility manager in the review of the Operational Logistics Support Plan.

e. Provide related guidance, standards and specific policies for the Maintenance and Logistics Commands (MLCs).

f. Provide technical guidance for the training of personnel in the electrician mate, machinery technician rates.

11. **Commandant (G-SLP) shall**:

a. Establish and review logistics policy for the 47' MLBs.

b. Provide logistics policy guidance for the Engineering Logistics Center (ELC).

12. **Commandant (G-SLS) shall**: Provide 47' MLB support organizations with the ability to manage their own parts inventories and configuration using CMPlus software, including providing installation and necessary initial training.

13. **Commandant (G-SCE) shall**:

a. Prepare, review, and approve fleet-wide standards for maintenance of electronics systems and equipment installed in the 47' MLBs. Provide policy direction to area commanders, district commanders, MLCs, and Commanding Officers regarding the operation, administration, and inspection of 47' MLB electronics systems and equipment.

b. Provide technical guidance for the training program for Electronics Technicians.

c. Supervise development of Coast Guard Planned Maintenance System (CGPMS), and manages the configuration control process for boat electronics systems.

d. Provide direct assistance to the facility manager in the development of funding models to justify standard funding support levels for the 47' MLB.

14. **Commandant (G-SEC) shall**: Provide direct support to 47' MLBs and their shore facilities as directed by the MLCs and Chapter 6 of this plan.

15. **Commandant (G-OPD) shall**:

a. Prepare, review and approve fleet-wide standards and instructions for general weapons maintenance policy, employment doctrine/policy, ordnance publication requirements, small arms, ammunition and ordnance training.

b. Provide technical guidance and establish allowances for ammunition and small arms.

16. **Commandant (G-OCS) shall**:

a. Be the Configuration Manager for the 47' MLBs after delivery of the last production boat. Develop and maintain the 47' MLB Operational Requirements Document (ORD).

b. As facility manager, develop, administer, and review plans, policies, procedures related to 47' MLBs operation. This includes the development of training and qualification standards, standardized configuration requirements and funding standards.

c. Maintain and distribute the OLSP based on content provided by the ELC and inputs from all elements of this plan.

d. Maintain the necessary AFC-30 standard funding support level in order to adequately maintain and operate the 47' MLB.

17. **Commandant (G-WTT) shall**:

a. Provide training development assistance in order to ensure boat crews and maintenance personnel are adequately prepared to perform their responsibilities.

b. Manage the maintenance and updating of the 47' MLB training material with assistance from Commandant (G-SRF)

18. **Commandant (G-SRF) shall**: As necessary, identify and develop engineering maintenance training solutions to ensure maintenance and repair personnel are adequately trained to perform the required support functions.

19. **Reserve Training Center (RTC) Yorktown shall**:

    a. Provide formal "A" school training for the qualification of maintenance personnel.

    b. Provide follow-on training for MLB boatcrews through existing training programs including MK "A", MK-01, Coxswain "C", and PQS.

20. **National Motor Lifeboat School shall**:

    a. Provide resident operations training courses to supplement JQR training including Basic Coxswain, Heavy Weather Coxswain, Engineering Petty Officer Course, and Ready for Operations Inspector course.

    b. Provide MLB Transition Training immediately following delivery of each MLB including boat operations, integrated systems training, general maintenance, and trouble shooting procedures.

21. **MLB Project Resident Office shall**:

    a. Oversee all aspects of contract administration for the 47' MLB construction project.

    b. Perform quality assurance inspections of boat construction, tests and trials.

    c. Review contractor furnished technical data, administer the contractor warranty program, and provide technical support to the field.

C. **Integrated Logistics Support Management Team (ILSMT)**. Until completion of the production process, Commandant (G-AWP) is the formal chairman of the ILSMT. After the acquisition is completed, Commandant (G-OCS) becomes the formal chairman of the ILSMT. Commandant (G-OCS) will delegate everyday authority and responsibility to the Standard Boat Platform Manager at the ELC (014). Permanent members of the ILSMT include:

MLCLANT
MLCPAC
G-AWP (until acquisition project termination)
G-SEN
G-SCE
G-SL
G-WTT

a. The ELC shall ensure the following ad-hoc members are informed of, and invited to ILSMT meetings. The Ad-hoc membership shall determine whether or not they will attend:

LANTAREA
PACAREA
ALL DISTRICTS
GRUs
G-SEC
G-WKS

b. Any permanent or ad-hoc member may send a representative from any subordinate unit.

CHAPTER 4. MAINTENANCE SUPPORT

A. **Concept**. This section describes the maintenance needs of the 47' MLB at the organizational, intermediate, and depot maintenance levels. The 47' MLBs will be maintained using existing Coast Guard, commercial, and Other Government Agency (OGA) facilities. Station COs/OINCs have the overall responsibility for scheduling maintenance for their individual boats. Assistance in performing maintenance will be provided by Coast Guard Bases, Groups, Integrated Support Commands, Areas, Districts, Maintenance and Logistics Commands, and other support organizations as appropriate. Each crew while in port will perform preventive and minor corrective maintenance as operational conditions permit. In addition, maintenance will be performed by 47' MLB boat crews, other support organizations, and commercial sources (contractors) during scheduled maintenance periods. Maintenance will be funded by AFC-30, AFC-42, and AFC-45 funds as described in this Chapter and the Supply Policy and Procedures Manual, COMDTINST M4400.19A.

B. **Equipment Categories**. For maintenance purposes, equipment is divided into three broad categories, Hull, Mechanical, and Electrical (HM&E), Electronics, Ordnance.

1. **Hull, Mechanical, and Electrical (HM&E)**. Maintenance policy for HM&E equipment is promulgated by Commandant (G-SEN) in the Naval Engineering Manual, COMDTINST M9000.6 (series). The Boat Class Maintenance Plan (BCMP) provides guidance for supply support and maintenance support responsibilities.

   a. **Hull**. The 47' MLB is constructed entirely of marine grade aluminum with a deep "V" planing hull. The 47' MLB has 17 vertical bulkhead frames, five of which are watertight frame structures, all welded to the boats hull and main deck.

   b. **Mechanical**. The engine room is located below and aft of the survivor's compartment, and contains two 435-bhp Detroit Diesel 6V92TA DDEC III electronically controlled engines. There are three DDEC III control stations, one located on the front console in the enclosed bridge, and one unit on each of the open bridge consoles. The gear space is located directly below the survivor's compartment, and contains two Reintjes 2:1 reverse reduction gears, and cardan shaft. The boat has steering controls at both the open and enclosed bridges, and is equipped with both power and manual hydraulic steering. The steering gear tillers, tie rod and attached parts are stainless steel and located in the lazzarette.

   c. **Electrical**. The electrical system consists of 120VAC, 24VDC, and 12VDC power distribution systems. AC power is provided from two separate sources. One source is shore power through the receptacle located on the forward deckhouse. The second source is two engine driven 5KW AC alternators that provide power to the two HVAC units while underway. The 47' MLB is equipped with a battery charger and two battery banks,

which supply the 24VDC and 12VDC power. Two engine driven 225 AMP DC alternators provide the 24 and 12VDC while underway.

2. **Electronic**. Electronic equipment is that principally containing circuits regulation conduction through devices such as tubes transistors, and integrated circuits. For purposes of Integrated Logistics support (ILS) planning, "electronics" refers to electronic equipment used for radio navigation, depth sounding, IFF, interior and exterior communications, including cryptography, CCTV, radar, command and control (C2), and electronic charting. Electronics also refers to computer systems integral to the performance of these functions, such as computers in an Electronic Chart Display and Information System (ECDIS) or communication system. For ILS planning, the term "electronics" generally does not refer to equipment used in propulsion and steering control systems, electrical power generation and distribution systems, gyrocompasses, speed logs, ordnance and fire control systems, control systems for HVAC systems, and other systems with primarily mechanical functions. This equipment is classified as HM&E electronics. In addition, electronics does not generally refer to aviation specific equipment. (See Chapter 6 of Electronics Manual, COMDINST M10550.25 for further details and examples). The Maintenance Support Guide (MSG) and the Boat Class Maintenance Plan (BCMP) delineates specific equipment categories.

   a. **Communication**. The major communications system on the 47' MLBs include:

      (1) Motorola Spectra A9 VHF-FM radio with associated antenna

      (2) CRP-Ray-152 HF transceiver with associated coupler and antenna

      (3) CRP-Ray-430 Loudhailer

   b. **Navigation**. The major navigation systems include:

      (1) CRP-NAV-398 with CRP-RAYSTAR-108 antenna

      (2) ST-50 Depth sounder

      (3) AN/SPS-69 RADAR System

      (4) CDYM-TD-L1550A Automatic direction finder system with associated antenna

      (5) CRP-RAYCHART-620 Electronic Chart system

3. **Ordnance**. The 47' MLB does not have any permanently installed ordnance onboard, but crewmen carry small arms for law enforcement missions. Maintenance policy, for ordnance equipment, is promulgated by Commandant (G-OPD) in the Ordnance Manual, COMDTINST M8000.2 (series) and Small Arms Manual, COMDTINST M8370.11 (series).

C. **Types of Maintenance**. Maintenance is divided into two types:

1. **Planned Established Maintenance**.

a. **HM&E Preventive Maintenance**. Preventive maintenance is routinely and systematically scheduled for the purpose of preventing and predicting equipment and system failures that will diminish the operation and safety of the boat. Maintenance of this type is defined in the PMS Manual TP-3343. It provides Coast Guard personnel with the information needed to perform the preventive maintenance requirements of the 47' MLB. Commanding officers are responsible for the scheduling, funding and accomplishment of all maintenance described in this instruction. It is expected that boat crews can accomplish the majority of the required preventive maintenance, but bases, groups, or commercial contractors and other government agency facilities will provide assistance as necessary to perform the balance of the preventive maintenance not performed by boat crews. Distribution and life cycle maintenance of the 47' MLB PMS manual is the responsibility of Commandant (G-SEN).

b. **Corrective Maintenance**. Corrective maintenance repairs and restores failures to equipment, systems, hull, and structure. Corrective maintenance is performed randomly. The amount and severity of corrective maintenance required can be moderated by preventive maintenance in two ways: proper operation, lubrication, and cleaning which tends to prevent catastrophic failure; and scheduled inspections which allow detection of incipient failures. HM&E corrective maintenance is accomplished at three levels, organizational, intermediate, and depot. Routine corrective maintenance is funded by AFC-30 regardless of the level at which it is performed. Major corrective maintenance (e.g., grounding, fire, and flooding casualties beyond the funding capabilities of the unit and Group) will be funded by AFC-45 and accomplished by the MLC.

(1) The 47' MLB crews ability to accomplish corrective maintenance is affected by the assigned skill levels, training, equipment complexity, and availability of replacement parts and tools. In general station maintenance personnel are expected to troubleshoot equipment casualties, isolate the cause of the casualties to the lowest replacement part, replace certain parts and components, and perform minor repairs to installed equipment. More complex part and component replacement and repairs will be accomplished at the

intermediate or depot levels. The Boat Class Maintenance Plan (BCMP) provided as enclosure (1) provides a broad outline of how corrective maintenance will be accomplished. The Source, Maintenance and Recoverability (SM&R) Codes, contained in the Management Information for Configuration Allowances (MICA), provides detailed information for each piece of installed HM&E equipment.

(2) Most HM&E corrective maintenance, beyond the capability of the station maintenance personnel, will be accomplished at the intermediate level. Corrective maintenance beyond the intermediate level facilities will be accomplished by depot level facilities. See enclosure (1) and the MICA for more details. The ELC and Commandant (G-SCE) have developed the Coast Guard Planned Maintenance System (CGPMS) for HM&E and Electronics equipment. CGPMS has been developed to provide a standardized planned maintenance system for all HM&E and Electronic equipment within the Coast Guard. It provides the necessary tools to plan, schedule, and perform effective planned maintenance.

(3) CGPMS procedures shall take precedence over all other forms of planned maintenance. Requests for deviations from the above procedure should be forwarded to the ELC and Commandant (G-SCE) via the cognizant MLC.

c. **Electronics Scheduled Maintenance**. Preventive maintenance is routinely and systematically scheduled for the purpose of preventing and predicting equipment and system failures that will diminish the operation and safety of the boat. Preventive Maintenance of this type will be defined in the Coast Guard Preventive Maintenance System (CGPMS) Work Schedule Book developed, distributed and maintained by Commandant (G-SCE). It provides Coast Guard personnel with the information needed to perform the electronics preventive maintenance requirements on the 47' MLB. Station Commanding Officers are responsible for the scheduling, funding and accomplishment of all maintenance described in this publication. Boat crews are not expected to accomplish the required electronic preventive maintenance. Electronic Support Units (ESUs), bases, groups, and/or commercial contractors and other government agency facilities will provide assistance as necessary.

2. **Contract Maintenance**. The contractor via the warranty process will provide contract maintenance for each 47' MLB. Each 47' MLB will be delivered to the Coast Guard with a one-year warranty on all systems and equipment except for engines and reduction gears, which have an extended warranty. Textron Marine and Land Systems (TM&LS), the 47' MLB prime contractor, is responsible for providing all provisions of the warranty to the Coast Guard. The 47' MLB

Warranty Plan (MLBINST 4335.1B) is administered by the 47' MLB Project Resident Office (PRO) and monitored by the Acquisition Project Staff Commandant (G-AWP), and establishes policy and provides guidance concerning the warranty program for the 47' MLB. Each 47' MLB will be provided a copy of the Warranty Plan upon boat delivery.

3. **MLB Haul-Out**. The 47' MLB shall be hauled out on an annual basis in accordance with USCG Boat Inspection Report CG3022 for underwater body inspection. The 47' MLB shall be hauled out during the bi-annual availability in accordance with the Boat Class Maintenance Plan (BCMP). During this haul-out, the below waterline paint shall be inspected and repaired/renewed as conditions dictate. Additionally, the below waterline hull plating shall be inspected and repaired/renewed as conditions dictate.

D. **Maintenance Levels**. Maintenance as defined in the NEM is accomplished at three (3) levels. The BCMP provides system specific guidance for the actions required at each of the three levels.

1. **Organizational Level**. The stations are responsible for accomplishment of all organizational level maintenance, (inspecting, servicing, lubricating, and adjusting) on all installed equipment. Organizational maintenance includes all Preventive Maintenance, minor Corrective Maintenance, and Facility Maintenance. Stations are responsible for CSMPs in accordance with the NEM. Major equipment removals, renovations, and alterations shall not be performed by the stations. The assigned Electronic Support Detachment (ESD) is responsible for electronics systems organizational level maintenance.

2. **Intermediate Level**. Intermediate maintenance consists of calibration, repair, overhaul, or replacement of damaged or unserviceable parts, assemblies, or components; the emergency manufacture of non-available parts; field changes and alterations; minor sandblasting and painting; and providing technical assistance. The Groups are responsible for accomplishment of Intermediate Level Maintenance, which in many cases consist of component exchange with a government agency or commercial distributor. Groups may request that the Coast Guard, Navy, Other Government Agency (OGA), or a civilian contractor perform specific maintenance requirements. These requirements generally fall into one of the following areas:

   a. Industrial activities at the Coast Guard Bases and ISCs perform HM&E intermediate, and in some cases, depot level maintenance when tasked and funded by the cognizant authority.

   b. Specific maintenance as authorized according to the BCMP, Enclosure (1), and performed by a contractor under a MLC or ELC administered contract.

c. Other electronic intermediate maintenance level sources include Electronics Support Detachments (ESDs), Electronics Support Units (ESUs), and Systems Management Engineering Facilities (SMEFs).

3. **Depot Level Maintenance**. Depot maintenance consists of major overhaul or a complete rebuild of parts, subassemblies, assemblies, components, and end items; including the manufacture of parts, modifications, testing, and reclamation as required. Depot maintenance facilities are more extensive than lower level maintenance activities and may include commercial assistance, dockside availabilities and dry-docking. Also, it involves the piece part repair/replacement of designated components removed by lower level maintenance resources. Electronic Depot Maintenance includes maintenance, overhauls, repairs, and alterations that are the responsibility of, and performed under the direction of the, MLCs, or the Engineering Logistics Center (ELC), and funded by AFC-30/42. HM&E depot maintenance, overhauls, repairs and alterations are the responsibility of the Groups. Engine and reduction gear overhauls will be done under the CEO program and are the responsibility of the ELC.

4. **Main Engine and Reduction Gear**. The contractor warrants each 47' MLB engine for a period of 4 years or 3000 hours whichever occurs first from the date of delivery. The reduction gears are warranted for a period of 18 months from the date of delivery to the CG. A 3,000-hour main engine Mean Time Between Overhaul (MTBO) replacement interval is scheduled for the 47' MLBs. A Central Engine Overhaul (CEO) program has been established and is administered by the Engineering Logistics Center (ELC). There is no scheduled replacement interval for the reduction gears. The reduction gear for the 47' MLBs will be maintained as a depot level repairable. Once the reduction gear becomes defective, the unit will submit a requisition through the normal Coast Guard requisitioning process, receive a replacement and turn in the defective gear. In the event of catastrophic failure of the MLB engine(s) during the warranty period, use of the Warranty Program is strongly urged. When mission capabilities and/or time constraints preclude the use of the Warranty Program, the unit should submit a request for replacement engine(s) from the CEO Program at the ELC through the proper chain of command. Units should be aware that if this option is exercised, the unit might be responsible for the cost of the engine(s) with no reimbursement from the Warranty Program.

5. **CEO Program**. The station engineering Petty Officer shall closely monitor the 47' MLBs engine hours. Upon reaching 3,000 operating hours, the EPO shall work with the station's Group Engineer and the cognizant Boat Manager (District/NESU) to make arrangements for the removal of the existing engine and replacing it with a CEO engine. All 47' MLB engines shall be removed between 3,000 and 3,600 operating hours with no exceptions. It is highly

recommended that engine removal and replacement coincide with the 47' MLBs bi-annual availability.

CHAPTER 5. SUPPLY SUPPORT

A. **General**. The Engineering Logistics Center (ELC) will develop and maintain the MICA document, which contains the required HM&E and electronic allowances to support the 47' MLB. All Long Lead Time Material (LLTM), shoreside spares, and system stock will be in place concurrent with, or prior to delivery of each boat. The ELC and other government stocking points are the primary source for needed spare and repair parts and will be queried first (by electronic means) prior to purchasing locally. Each Station, Group, and ESD/ESU receives an initial compliment of predetermined spares and outfit material. Each MLB will utilize existing shoreside storage facilities for the stowage of shoreside spares. All spares, repair parts, test equipment, tools, and equipage will be stocked at the station, group, or at the ELC.

B. **Allowance Documentation**.

1. **Management Information for Configuration Allowance (MICA)**. MICA is the standard allowance document for cutters and boats. It identifies the HM&E and Electronic shoreside allowances to support the operational 47' MLBs. Supply Policy and Procedures Manual, COMDTINST M4400.19A, contains specific information concerning overall management of supply support functions associated with the MICA document. The ELC will produce and distribute MICA, and the proper media to load spare and repair parts information into the Shipboard Computer Aided Maintenance Program (SCAMP) or Configuration Management Plus (CMPLUS) program.

2. **Ordnance**. There is no ordnance stored onboard the 47' MLB. However, small arms are carried onboard during operational evolutions. Ordnance support will be provided by the Group, and maintenance will be accomplished in accordance with established guidelines in the Coast Guard Ordnance Manual, COMDTINST M8000.2 (series). Commandant (G-OPD) is responsible for updating this manual and promulgating overall Coast Guard ordnance policy.

C. **Reparable Management**. The repair of an unserviceable item, as an alternative to replacing it with a new one, is a method of supply support that can be an economical and effective means of satisfying operational requirements. Source, Maintenance and Recoverability (SM&R) codes contained in the MICA designate these items. These codes define the disposition of HM&E and Electronic equipment and what activity will receive them for repair and/or disposition. The ELC as of the Coast Guard Support Date (CGSD) 13 May 98 has managed a reparable program for the 47' MLB in accordance with the Coast Guard Uniform Supply Operations Manual, COMDTINST M4121.4 (series) and the Defense Regional Interservice Support Regulation (DRIS), DOD 4000.19-R.

D. **Unit Supply Support**. Source codes for replenishment of spares, repair parts, and support and test equipment is accomplished through the ELC and commercial sources. These codes are contained in the allowance document (MICA) or by the Source of Supply (SOS) and the Acquisition Advice code (AAC) listing. The Unit, Group and Area shall adhere to these guidelines to facilitate development and

recording of usage demand history, reduce excess, and identify obsolete material in the supply system. MICA covers the Hull, Mechanical, and Electrical, and Electronic systems for boats and shoreside support units. It identifies spare parts, special tools, and allowed quantities required to operate and maintain the unit for a specified period of time.

E. **Responsibility**. Administration and maintenance of the supply support programs are under the cognizance of Commandant (G-SEN), and the ELC. For responsibilities and directions regarding this program refer to the Supply Policy and Procedures Manual, COMDTINST M4400.19, (series).

F. **Appropriations**. Supply support inventory materiels are normally centrally procured by the ELC using their Supply Fund (SF) and Appropriations Purchase Account (APA) accounts. The SF inventory items are normally issued and chargeable to the requisitioning unit; however, APA items are free issue. APA items are characterized by relatively high cost, long lead production/delivery time, subject to design or configuration controls, mission critical, normally have a long life and are managed as an insurance item.

G. **Operational Boat Outfit Items**. The 47' MLB Operator's Handbook, COMDTINST M16114.25 lists the required boat outfit items to be carried onboard the vessel for underway operations. Upon delivery, the 47' MLB is outfitted with all required boat outfit items. Stations are funded and are responsible for the proper maintenance, upkeep and replacement of boat outfit items to ensure that all items are carried on board while underway.

H. **Personal Protective Equipment**. Stations are responsible for maintaining adequate personal protective equipment to ensure that all boat operators and passengers are provided sufficient personal protective equipment as required by the 47' MLB Operator's Handbook, COMDTINST M16114.25 and the Rescue and Survival Systems Manual, COMDTINST M10470.10 (series).

CHAPTER 6. OTHER LOGISTICS SUPPORT ELEMENTS.

A. **Manpower and Personnel Support**.

1. **General**. The 47' MLB will be staffed with a minimum crew of four as prescribed in the 47' Motor Lifeboat Operator's Handbook, COMDTINST M16114.25. Each station is staffed to the level necessary to perform all currently assigned operational missions; provide all administrative and personnel support; perform all training required; and to perform 100% of organizational level facility, preventive and corrective maintenance. This includes all routine daily, weekly, monthly and quarterly PMS. Group staffs will assist in accomplishing some organizational and intermediate level maintenance as well as providing administrative and support personnel.

2. **Personnel Support Level Evaluations**. Operational and support commanders will assess personnel support levels and identify and take action to remedy deficiencies, as described.

   a. Station Commanding Officers/OinCs shall report their inability to properly accomplish assigned missions and maintenance tasks to their district commanders via the chain of command. Close liaison with group staffs is essential for proper completion of maintenance.

   b. District and Group Commanders shall ensure that required maintenance days, as specified by paragraph 081.C.1 of the Naval Engineering Manual, COMDTINST M9000.6 (series) are included in operating schedules and that adequate group personnel resources are allocated to support the 47' MLB. A balance between operational needs, maintenance needs and maintenance funding is essential.

   c. District and Group Commanders shall ensure that personnel and standard funding allocated for boat maintenance are utilized appropriately. Where allocated funding or personnel are insufficient to complete required maintenance, the District shall notify the facility manager, Commandant (G-OCS).

   d. Commandant (G-OCS), as facility manager, will resolve personnel support level problems through the Planning, Programming, Budgeting and Evaluation System (PPBES) in cooperation with support program managers.

3. **Billet Structure**. The billet structure of the 47' MLB stations will be allocated per the station-staffing algorithm as maintained by the facility manager. The billet structure listed below represents the typical rank/rate structure for 47' MLB command cadre and boat crews. Billets vary from station to station for a variety of reasons.

BILLET	RANK/RATE
CO/OINC	LT/CWO/BMC/BM1
XPO	BMC/BM1
EPO	MKC/MK1
COXSWAIN	BM2/3
ENGINEER	MK2/MK3/FN
CREWMEMBER	SN/FN

B. **Training and Training Support**.

1. **Concept**. The training and training support for the 47' MLB are intended to provide sufficient skills and knowledge for those boat crews transitioning from another Coast Guard standard boat platform to the 47' MLB so that they may safely operate on all assigned Coast Guard missions. In addition, the training policy guidance and infrastructure exists to maintain follow-on qualified and certified boat crews at all 47' MLB stations. Commandant (G-OCS) will provide operational requirements and conduct analysis to derive training requirements. After acquisition is complete, follow on crews will be trained through existing programs including MK "A", MK-01, Coxswain "C", and PQS. A Performance Analysis was conducted, and changes were made to these courses/processes to adapt to the performance needs resulting from the new 47' MLB. Commandant (G-OCS) will coordinate with Commandant (G-WTT) and Commandant (G-SRF) to develop courses as necessary.

2. **Requirements/Constraints**. Station boat crews, supervisors, and selected members of Group staffs shall be provided a broad spectrum of training, as described below and provided in the Master Training List (MTL) Enclosure (2). This will be (1) Coast Guard provided at the NMLBS, (2) Contractor provided at the 47' MLB delivery points (3) Contractor provided at his facility. For training and qualification purposes, manufacturer system and component manuals, operator's manuals, and the Preventive Maintenance Manual (PMS) have been provided to the boats prior to delivery. For follow-on training, G-OCS will request budget or billet resources for training required for this project.

3. **Transition Training**. Prior to and immediately following delivery of a new 47' MLB, each station will receive a sequence of indoctrination training on the proper maintenance and operation of the 47' MLB. Station boat crews, supervisors, and selected members of Group staffs shall be provided a broad spectrum of training, as described below and provided in the Master Training List (MTL) Enclosure (2). The goal of this transition training is to provide a core group of senior Boatswain Mates and Machinery Technicians the skills and knowledge necessary to perform their required duties and to also pass along their experience to less experienced individuals at the unit. This series of transition training is not designed to produce fully qualified and certified

personnel; rather it gives them a substantial introduction to the tasks necessary to fully qualify and certify once the 47' MLB has been delivered to the unit. Ideally, all stations will have fully transitioned (certified) all previously qualified boat crew personnel within 60 days after receiving their 47' MLB.

a. **Engineering Training**. The contractor provides two different five-day courses at the factory on the major systems (engine, marine gear, electronic vessel/engine controls, steering, and HVAC) operations, troubleshooting, and maintenance training is rating-specific for station and group engineering and technical staff. This training is being provided not less than 2 nor more than 3 months prior to boat delivery.

b. **Familiarization Training**. Upon delivery and acceptance of each production 47' MLB, the prospective station crew will receive up to 16 hours of Familiarization training from the contractor at the delivery point. This training will consist of basic boat characteristics, and operation, equipment location, and operations and demonstration of Division One and Two tasks contained in the Boat Crew Qualification Guide, Volume II, Coxswain, COMDTINST M16114.11 (series).

c. **NMLBS Transition Training**. This training is a five-day exportable training and is provided by the National Motor Lifeboat School to station boat crews and station supervisory personnel immediately following boat delivery. Transition training will include boat operations (handling, evolutions, and standard procedures) integrated systems training (navigation and control systems), general maintenance, and troubleshooting procedures.

4. **Follow-On Training**. Commandant (G-OCS) in conjunction with Commandant (G-SRF), Commandant (G-WTT) and appropriate program and support managers have established training requirements as described below and identified them in the MTL. Commandant (G-OCS), Commandant (G-SRF), and Commandant (G-WTT) will collate these requirements and maintain the Master Training List (MTL). The administration of the MTL is the responsibility of the Training Quota Management Center (TQC) and the NMLBS.

a. **Job Qualification Requirements (JQR)**. The Boat Crew Training Manual, COMDTINST M16114.9 (series) and the Boat Qualification Guide, COMDTINST M116114 (series) describes the minimum knowledge and skills a trainee must have to correctly perform as a qualified boat crew member on the 47' MLB. The 47' MLB Operator's Handbook, COMDTINST M161114.25 (series) provides the minimum number of qualified personnel required to safely operate the 47' MLB.

b. **Resident Operations Training**. After acquisition is complete, resident operations training for follow-on crews will be provided through existing training programs including PQS, Coxswain "C" and the National Motor

Lifeboat School. Changes were made to these courses/processes to adapt to the performance needs resulting from the new 47' MLB. Additionally, the NMLBS provides several different resident training courses designed to supplement JQR training and provide coxswains and MLB support personnel special skills necessary to operate and maintain the 47' MLB.

(1) MLB Basic Coxswain

(2) MLB Heavy Weather Coxswain.

(3) MLB Engineering Petty Officer Course

(4) Ready for Operations Inspector Course

c. **Engineering Maintenance Training**. The results of the 47' MLB Training Situation Analysis, (TSA) and the Front End Analysis (FEA) were reported in the 47' MLB Performance Analysis Report 4 Dec 98, conducted by the Performance Technology Center at Reserve Training Center (RTC) Yorktown. The report concluded that no additional follow-on training would be required for the 47' MLB with one exception. It was determined that modifications to the MK "A" school to include more training in electrical skills (e.g., advanced use of a multimeter, schematic reading and symbols, and basic electrical theory) were necessary. These modifications are currently under development by RTC Yorktown for incorporation into the MK "A" and MK-01 curriculums. The qualification of maintenance personnel shall be obtained by their attendance at formal "A" school training courses and on the job training. Follow-on training needs will be met through these revised courses, and the use of contractor (Detroit Diesel Corporation) provided courses. Two boat sets of Detroit Diesel Electronically controlled (DDEC) 6V92TA engines were provided to RTC Yorktown to use as training aids. The engines will be used in the development of an "A" school type curriculum aimed at familiarizing students in the operation of electronically controlled small boat engines. Special training equipment is also included in the boat maintenance factory training provided by the contractor (TMLS). This equipment includes a functional DDEC simulator and a marine reduction gear.

4. **Master Training List (MTL)**. The Master Training List, Enclosure (2) provides a complete listing by rating, ranking and specialty of required training authorized for personnel assigned to the 47' MLB.

C. **Support and Test Equipment**.

1. **General**. Support and test equipment has been provided to Stations and Groups to meet maintenance requirements listed in the MICA document. Each 47' MLB station received a ProLink data reader. The maintenance philosophy of the 47'

MLB relies heavily on the electronic diagnostic tools to assist the engineer in the diagnostic, maintenance and repair processes. This fact makes lifetime support of the Prolink 9000, onboard Electronic Display Modules (EDMs), and manufacturer diagnostic technical manuals critical to the repair and maintenance of the small-boat by Coast Guard personnel. The assigned Electronic Support Detachment (ESD) will provide the electronic test equipment to support electronics maintenance.

2. **Requirements/Constraints**. Minimal support and test equipment is needed to maintain the 47' MLBs. The selection of tools and test equipment to be carried aboard during operations will be based on the size and weight of the equipment, the likelihood of its need, and the ability of the crew to effectively use it. Each individual 47' MLB together with the appropriate base or group shall determine the storage arrangements and establish procedures for inventory and maintenance of this equipment.

D. **Support Facilities**.

1. **47' MLB Requirements**. Commandant (G-SEC) has conducted a survey at each homeport site and has identified upgrades required to accommodate the 47' MLB. Acquisition, Construction, and Improvements (AC&I) funds to improve some existing shore facilities were provided by Commandant (G-AWP) to accomplish the required improvements and upgrades. Shore funded AC&I projects have also been identified to accommodate the 47' MLB. All other upgrades are to be accomplished with AFC 43 funds. Upgrades are typically scheduled to be completed prior to the arrival of the boat. For guidance concerning cost estimates, shore facilities, space allocation, and submittal of planning documents, contact Commandant (G-SEC), U.S. Coast Guard, Washington, DC 20593, (202) 267-1959.

   a. **Boat Berth Requirements**.

      (1) **Depth Requirements**. 5 feet minimum at lowest predicted tide. Whenever possible provide 7 feet.

      (2) **Mooring Length**. 58 feet minimum single pier alongside. 53 feet minimum finger pier one side, 40 feet minimum finger piers each side (21 feet minimum width)

      (3) **Mooring Height**. 18 feet (with mast folded)) 28 feet 4 inches (top of antenna). If covered mooring, minimum height required is 18 feet above highest predicted tide.

      (4) **Mooring Width**. 21 feet min. negligible wind and current sites. 24 feet min. nominal wind and current sites

b. **Facilities Connections**.

(1) **Sewage**. The 47' MLB is equipped with a Porta-Potti located in the forward compartment on the port side between frames 10 and 11. The Porta-Potti must be manually emptied after each use. No shore tie required for sewage.

(2) **Fuel**

(a) Drawing - (47AMLB-505-020)

(b) Connection: (1) 2.0" AL ALY schedule 40 pipe with Camlock cap. Fuel tank capacity 412 gallons.

(3) **Grey Water**. Not applicable to the 47' MLB. No requirements exist.

(4) **Bilge Water**. The 47' MLB has no external facility connection for bilge water. This typically handled by a portable pump and drum arrangement. The 47' MLB is equipped with 7 submersible bilge pumps with a minimum 1300 GPH capacity. The overboard discharge is located above the waterline, and is equipped with check valves to prevent back flooding.

(a) Drawing - (47AMLB-505-020)

(b) Connection: (7) 1.0" Check Valve W/Umbrella valve.

(5) **Telephone**. No requirements exist.

(6) **Potable Water**. There are no potable water connections on the 47' MLB. A 5-gallon insulated portable fresh water jug is located in the survivor's compartment on the port side aft. A 10" X 24" sink is located directly below the fresh water jug and drains directly overboard via a 1 inch diameter hose connected to a 1 inch schedule 40 aluminum pipe.

(7) **Electrical**

(a) Drawing - (47AMLB-300-010)

(b) Boat requires 120 VAC, 60 HZ, Single Phase

(c) Shore Load: 10.38 KW

(d) Shore Power Cable: 60'. 3 Wire Part # LSTHOF-75

(e) 1 Cable Plug: Boat Side, Hubbell Inc. Part # M4100C12R

(f) Shore Power Receptacle: Hubbell Inc. Part # M4100B12R.

(g) Receiving unit must install shore side plug to match shore side receptacle. Intent is to standardize shore tie for 47' MLB and 49" BUSL, to permit sharing of berths. Local standards should be adopted with the Area Of Responsibility (AOR) to permit sharing of shore ties among boat types.

(8) **Fuel Dispensing**. Not applicable to the 47' MLB. No requirements exist.

(9) **Compressed Air**. Not applicable to the 47' MLB. No requirements exist.

c. **Mooring Devices**. A minimum of three bollards/cleats spaced not more than 30 feet apart is required for the 47' MLB.

d. **Deck Fittings**. See drawing 47BMLB-582-010 "Mooring Arrangement Details", for deck fitting locations.

e. **Fendering System**. The 47' MLB is equipped with Ionomer foam fenders approximately 6" in width and 8" in height. The fenders are attached to the shell by aluminum/titanium bonded studs.

(1) Drawing (47B MLB 611-020)

f. **Shoreside Requirements**.

(1) **Fire Protection**. In general, the fire protection for piers should conform to the National Fire Code recommendations. Local fire codes and possible fire hazards will determine the equipment and the type of protection needed at a specific pier.

(2) **Lighting**. At least 5 foot-candles for open working areas on a slip and in storage buildings while working.

(3) **Parking**. No new requirements are planned.

(4) **Refuse Removal**. Not applicable to the 47' MLB. No requirements exist.

2. **Support Facility Planning Procedures**. A shore facilities compatibility study was completed and improvements are underway, but additional shore facility upgrades may be necessary. Boat Maintenance Facilities (BMF) must be capable of accommodating the 47' MLB with the radar platform removed. This leaves the windscreen at 16 feet 5 inches above the keel (with 2-inch clearance required below the keel). Also, allow adequate clearance for haul-out platform. See General Information Book (GIB) TP-3355 for sketch of boat with dimensions.

3. **Work space and Storage Facilities**. The 47' MLB will utilize the same station facilities as the standard boat it replaces.

E. **Configuration Management (CM)**.

1. **Concept**. CM is the element of program management that ensures that uniform methods of configuration identification, technical reviews, configuration audits, configuration control, and configuration status accounting are implemented and maintained for Configuration Items (CIs) in each program. The 47' MLB and each of its subsystems and components is a CI. The application of these methods results in effective control of the configuration of each 47' MLB throughout its life cycle. CM, as defined in Coast Guard Configuration Management During Sustainment, COMDTINST M4130.9 establishes the discipline for managing the functional and physical characteristics of the 47' MLB as well as its documentation throughout its life cycle.

   a. Because of the severe nature of the operating condition, which the 47' MLB is expected to operate, the configuration management is a critical logistical support element for the 47' MLB. As a standard boat platform, the fleet-wide standardization of 47' MLB ensures consistency of hull configuration, installed equipment and operational outfit. Because of this consistency of configuration, qualified boat crews can be confident in the repeatable operating performance, handling characteristics and equipment function regardless of the specific 47' MLB hull they operate.

   b. In order to insure the safety and effectiveness of those operating 47' MLB, no temporary or permanent configuration changes are authorized without the permission of the 47' MLB Configuration Control Board Chairperson (CCB). The procedures for requesting configuration changes are outlined in Chapter 41 of the Naval Engineering Manual, COMDTINST M9000.6 (series). An approved BoatAlt will have received the approval of the CCB Chairperson.

c. Closely related to configuration management and equally, rigorously, enforced, are the standardization requirements outlined in MLB & UTB Standardization Program Manual, COMDTINST M16114.24 (series) and the 47' MLB Operator's Handbook, COMDTINST M16114.25 (series).

2. **Responsibilities**. Commandant (G-AWP) is the Configuration Control Board chairperson until the last boat is delivered. After the last production boat is delivered and integrated into the operational fleet, CM responsibility shall transfer from Commandant (G-AWP) to the facility manager, Commandant (G-OCS). The Configuration Manager chairs the Configuration Control Board which includes representatives of Commandant (G-OCS), (G-SEN), (G-SLP), (G-SCE), (G-WTT), (G-WKS) and (G-ACS). CM efforts for the 47' MLB will be conducted in accordance with the 47' MLB Configuration Management Plan (CMP) and Coast Guard Configuration Control Boards, COMDTINST M4130.10 (series).

a. **Configuration Identification**. Configuration Identification is that process, which identifies what, is under configuration control. The following paragraphs provide this detail. Generally configuration items for the 47' MLB consists of everything making up the boat, its outfit, and the documentation that applies to the boat. The current technical baseline for the 47' MLB is the approved production specifications and drawings. The configuration baseline, plus changes to the baseline approved by the Configuration Control Board (CCB), will constitute the Product Baseline and reflect the current configuration of the 47' MLB at any given time. Commandant (G-SCE) has provided standard nomenclature for the electronics equipment installed on production boats.

(1) **Functional Configuration Audit (FCA)**. The FCA was performed during the Operational Test & Evaluation (OT&E) phase to ensure the technical documentation accurately reflects the functional characteristics and performance requirements.

(2) Physical Configuration Audit (PCA). The PCA was conducted by the ELC to identify all Configuration Items (CI) and to verify the validity of the Configuration Status Accounting (CSA) list provided by the contractor. The PCA also compares the drawings and a specification against each boat to ensure the "as built" configuration matches the "as designed" configuration.

b. **Configuration Control**. Configuration control is the process of maintaining and regulating all changes to the baseline. Engineering Change Proposals (ECPs), deviations, waivers; Configuration Change Requests (CCRs) and Boat Alteration (BOATALT) requests during the operational phase will be

reviewed by the CCB as part of the configuration control process. Standardization Team visits, beginning within the first year of operation of each boat, will identify any departure from the approved configuration and standardization baseline and enhance our ability to properly control the 47' MLB configuration. Any unauthorized configuration change to any configuration item on a 47'MLB must be immediately restored to the original configuration.

c. **Configuration Status Accounting (CSA)**. Configuration status accounting provides traceability of changes to the configuration baselines and assures the accomplishment of all related tasks resulting from such baseline changes. The Project Manager will ensure that all changes to technical manuals, drawings, test documentation, and provisioning documentation are provided to the ELC. The contractor has provided a Configuration Status Accounting (CSA) List for each boat delivered. This list identifies each installed equipment and identifies it to its applicable drawing, Provisioning Technical Data (PTD) list, and technical manual. Once CMPlus has been fielded for the 47' MLB, CMPlus, in conjunction with the Fleet Logistics System, will contain the CSA.

F. **Packaging, Handling, Storage and Transportation (PHS&T)**.

1. **Normal PHS&T**. Contractor furnished shoreside spares and ELC system stock were preserved, packaged, packed and marked in accordance with ASTM D3951. Any other spares or repair parts purchased from the contractor were packaged, preserved and packed in accordance with "Level A Packaging and Packing" of MIL-E-17555H. Marking will be per MIL-STD-129M. In addition, shafting and propellers were packaged in accordance with MIL-P-2845D (SH).

2. **Special PHS&T**. Spare reduction gears were packaged in accordance with MIL-C-104C. Spare engines were packaged in reusable metal containers and preserved per MIL-E-10062E (AT). Packaging, handling, stowage and transportation of ELC controlled material was accomplished per the Transportation of Freight, COMDTINST M4610.5 (series), Transportation; and the Inspection, Packaging, Handling, Storage and Transportation Handbook, COMDTINST M4450.1 (series). Contractor furnished allowance material, shoreside spares, system stock, and LLTM were provided with bar codes in accordance with MIL-STD-1189D.

G. **Computer Resources Support**. The 47' MLB is equipped with two 435HP 6V92TA Detroit Diesel Electronically Controlled (DDEC) engines and will be supported and maintained at a component replacement level by the ELC. Existing shoreside Automated Data Processing (ADP) equipment and software to include Coast Guard Standard Workstation II and III (CGSWII/CGSWIII) will be installed to the degree necessary to support operational and administrative functions and will be maintained by Commandant (G-SCC).

H. **Technical Data**.

1. **Boat Class Maintenance Plan (BCMP)**. Commandant (G-SEN) is responsible for formulating and maintaining the maintenance policy outlined in the BCMP. This plan outlines the maintenance philosophy required to support the operation of the 47' MLB. Its purpose is to provide guidance for the Integrated Logistics Support efforts and document maintenance support responsibilities. In addition, Commandant (G-SEN) has promulgated and distributed the Preventive Maintenance System Manual (TP-3343) which provides Coast Guard personnel with the information needed to perform the preventive maintenance requirements of the 47' MLB. Commandant (G-SCE) will prepare, review and approve fleet wide standards and instructions for the maintenance of electronics systems and equipment installed in the 47' MLB. They will develop and maintain a Preventive Maintenance System (PMS) manual outlining specific maintenance requirements for electronics systems.

2. **Operator's Handbook**. Commandant (G-OCS) promulgates and maintains the 47' MLB Operator's Handbook, COMDTINST M16114.25 (series). This handbook contains information necessary for the safe and efficient operation of the 47' MLB. It defines operational capabilities & limitations, the readiness impact of material deficiencies, crew requirements, mission performance information and emergency procedures. In addition, it shows or describes the fittings, the boat outfit list, and the physical characteristics of the boat.

3. **Warranty Manual**. The Warranty Manual was developed by Commandant (G-AWP), and establishes policy and guidance concerning the administration of the warranty program for the 47' MLB. The principal purpose of a warranty in a government contract is to delineate the rights and obligations of the Contractor and the Government for defective items and services and to foster quality performance. The 47' MLB warranty provides the CG additional time after boat acceptance in which to determine and report defective items or services. The Motor Life Boat Project Resident Office (MLBPRO) is responsible for enforcing the contract warranty terms and conditions, tracking the status of warranty repairs and materials, confirming the technical acceptance of repairs, and reporting the status of each MLBs warranty program. Each 47' MLB is delivered to the Coast Guard with a one-year warranty on all systems and equipment. In addition, each of the 47' MLBs marine reduction gears are warranted for a period of 18 months, and each of the engines are warranted for a period up to four years or until such time the engine(s) reach 3,000 hours

4. **Technical Publications (TPs)**. The maintenance philosophy of the 47' MLB relies heavily on the manufacturer provided technical manuals to assist the engineer in diagnostic, maintenance and repair processes. This fact makes lifetime support of the manufacturer's diagnostic technical manuals critical to

the repair and maintenance of this small-boat by Coast Guard personnel. The Coast Guards Engineering Logistics Center (ELC) promulgates, distributes, and maintains the general and manufacturers information books for the 47' MLB. These manuals are arranged according to their Ships Work Breakdown Structure (SWBS) category. They contain the combined Hull, Mechanical and Electrical (HM&E) general and manufacturers information manuals for the operation and maintenance of various systems and equipment installed on the 47' MLB. These manuals include TP-3355 through TP-3360. Additionally, the ELC has promulgated and distributed Electronics manuals, which provide information for the operation and maintenance of various electronic systems and equipment installed on the 47' MLB. These manuals include TP-3378 and TP-3379. These manuals were published on 12 March 1998 and have been assigned National Stock Numbers (NSN) and can be ordered through the Coast Guards normal MIL-STRIP requisition process. Technical Publications are provided to all stations, groups, MLCs and districts in accordance with current directives by Commandant (G-SEN). The ELC is currently in the process of incorporating these technical publications into a CD-ROM format called NE-TIMS (Naval Engineering-Technical Information Management Systems). This will be available to the respective units when completed and also via the Coast Guard Intranet.

5. **Index of Manuals**. Table 1 below provides an index of manuals and tech pubs and indicates which support commands shall be responsible for maintaining them as part of the 47' MLBs standard boat record.

Table 1

TP/MANUAL	STATION	GROUP/ ISC	MLC	NESU	ESD/ESU	ELC
BCMP	**X**	**X**	**X**	**X**		**X**
CGPMS TP-3343	**X**	**X**	**X**	**X**	**X**	**X**
CSA	**X**	**X**				**X**
Operator's Handbook	**X**	**X**				
Warranty	**X**					
OLSP	**X**	**X**	**X**	**X**	**X**	**X**
MICA	**X**	**X**	**X**	**X**	**X**	**X**
TP-3355 (HM&E)	**X**	**X**	**X**	**X**		**X**
TP-3356 (HM&E)	**X**	**X**	**X**	**X**		**X**
TP-3357 (HM&E)	**X**	**X**	**X**	**X**		**X**
TP-3358 (HM&E)	**X**	**X**	**X**	**X**		**X**
TP-3359 (HM&E	**X**	**X**	**X**	**X**		**X**
TP-3360 (HM&E)	**X**	**X**	**X**	**X**		**X**
TP-3378 (ELEX)	**X**		**X**		**X**	**X**
TP-3379 (ELEX)	**X**		**X**		**X**	**X**

6. **Drawings**. The ELC will provide 47' MLB drawings in accordance with current Coast Guard directives to all support commands as necessary. As a result of NE-TIMS implementation, aperture cards of these drawings are no longer

provided at the group level. These drawings shall provide the design disclosure information necessary to enable a manufacturer of similar products at the same or similar state of art to produce and maintain quality control of items so that the resulting physical and performance characteristics duplicate those of the original setup. These drawings reflect the end product at its current level of design maturity and provide engineering data for logistics support products. In the future, 47' MLB drawings will also be distributed via CD-ROM and the Coast Guard Intranet.

a. **Acquisition Phase**. Funding during the acquisition phase shall be provided by Commandant (G-AWP) for drawing, aperture card and technical publication development. Distribution shall be in accordance with lists developed as needed by Commandant (G-SEN).

b. **Sustainment Phase**. Funding during the sustainment phase shall be provided by the ELC operational budget model. Distribution of items shall be in accordance with distribution lists maintained by the ELC, with guidance from Commandant (G-OCS) and (G-SEN).

I. **Miscellaneous**. The ELC will maintain a pool of 23 boatsets of 47' MLB engines for the lifecycle support of the boat. A scheduled 3000-hour change out interval has been established for the 47' MLB.

CHAPTER 7. MILESTONES

A. **Major Program Events**. Table 7-1 contains the major project events that have occurred and are scheduled to occur during the life of the project.

B. **Logistics Milestones**. Specific milestones associated with this OLSP are included in Table 7-2. The facility manager in accordance with the Logistics Support Plans and Policies Manual, HQINST 4081.2 will conduct updates to these milestones.

TABLE 7-1
MAJOR PROGRAM EVENTS

MAJOR PROGRAM EVENTS	SCHEDULED DATE	ACTUAL DATE	REMARKS
AWARD PRODUCTION CONTRACT	09/11/95	09/11/95	
1ST PRODUCTION DELIVERY	03/04/97	05/13/97	
INITIAL OPERATIONAL CAPABILITY	03/04/97	05/13/97	
MATERIAL SUPPORT DATE (MSD)	05/13/97	10/17/98	
CG SUPPORT DATE (CGSD)	05/13/98	09/18/98	
1ST CONTRACT OPTION AWARD	10/01-09/30	11/21/96	
2ND CONTRACT OPTION AWARD	10/01-09/30	12/23/97	
3RD CONTRACT OPTION AWARD	10/01-09/30	06/09/99	
4TH CONTRACT OPTION AWARD	10/01-09/30	12/01/99	

TABLE 7-2
LOGISTICS MILESTONES

ACTION	MILESTONE	SCHEDULED DATE	ACTUAL DATE
	CONFIGURATION MANAGEMENT		
G-AWP	UPDATE CM PLAN		
G-AWP	PERFORM CONFIGURATION CONTROL OF PRODUCT BASELINE	03/11/97	05/13/97
ELC	PERFORM CONFIGURATION AUDIT	09/24/97	11/16/97
	ILS PLANNING		
G-AWP	SCHEDULE ILSMT MEETINGS	QUARTERLY	ONGOING
	ISSUE OLSP	05/13/98	01/10/00
	ILS AVAILABILITY	05/13/98	08/17/98
	CEO IMPLEMENTATION	05/13/00	07/30/98
	MAINTENANCE PLANNING		
ELC	UPDATE PMS	AS NEEDED	
ELC	UPDATE MAINTENANCE PLAN	AS NEEDED	
	SUPPORT EQUIPMENT		
ELC	VERIFY ALLOWANCE LIST	11/05/97	EACH OPTION
	DELIVER TECHNICAL PUBLICATIONS	03/04/97	05/13/97
	SUPPLY SUPPORT		
G-AWP	INVOKE SPARE & REPAIR PARTS SUPPORT	05/13/98	08/17/98
G-AWP	INVOKE PROVISIONING REQUIREMENTS	02/14/96	02/14/96
CONTR	SUBMIT PTD	01/16/96	01/31/96
ELC	VALIDATE & APPROVE PTD	01/31/96	01/31/96
ELC	COMPLETE PROVISIONING	10/01/00	
ELC	PROVIDE MICA DOCUMENT	07/01/98	04/05/99
G-AWP	COMPLETE PROJECT TERMINATION PLAN	07/30/03	
ELC	MATERIAL SUPPORT DATE (MSD)	05/13/98	08/17/98
G-AWP	IDENTIFY PHS&T REQUIREMENTS	09/11/95	09/11/95
G-AWP	UPDATE DELIVERY SCHEDULE	EACH OPTION	ONGOING
	COMPUTER RESOURCES		
G-AWP	UPDATE CMPLUS DOCUMENTATION TO REFLECT PRODUCTION CONFIG.	03/04/99	
	TECHNICAL DATA		
ELC	PRINT AND DISTRIBUTE TPs	05/13/97	07/30/98
ELC	STOCK AVAILABLE TPs	05/13/97	07/30/98
ELC	DISTRIBUTE LEVEL 3 DRAWINGS	05/13/97	07/30/98
	FACILITIES		
G-SEC	ENSURE FACILITIES ARE OPERATIONAL	03/04/97	03/16/92
	TRAINING & TRAINING SUPPORT		
G-WTT	UPDATE TRAINING PLAN	05/13/98	09/21/98
G-WTT	START FOLLOW-ON TRAINING		
	QUALITY ASSURANCE		
TM&LS	IMPLEMENT QA PROGRAM	11/19/95	02/09/96

GLOSSARY OF ACRONYMS

AAC	ACQUISITION ADVICE CODE
AC	ALTERNATING CURRENT
AC&I	"ACQUISITION, CONSTRUCTION AND IMPROVEMENTS"
ADP	AUTOMATED DATA PROCESSING
AOR	AREA OF RESPONSIBILITY
APA	APPROPRIATIONS PURCHASE ACCOUNT
BOATALT	BOAT ALTERATION
BCMP	BOAT CLASS MAINTENANCE PLAN
BMF	BOAT MAINTENANCE FACILITY
CASREP	CONSOLIDATED CASUALTY REPORTING SYSTEM
CCB	CONFIGURATION CONTROL BOARD C
CR	CONFIGURATION CHANGE REQUEST
CD-ROM	COMPACT DISK-READ ONLY MEMORY
CEO	CENTRAL ENGINE OVERHAUL
CGSD	COAST GUARD SUPPORT DATE
CI	CONFIGURATION ITEM
CM	CONFIGURATION MANAGEMENT
CMP	CONFIGURATION MANAGEMENT PLAN
CMPLUS	CONFIGURATION MANAGEMENT PLUS
COMDTINST	COMMANDANT INSTRUCTION
CO/OIC	COMMANDING OFFICER/OFFICER IN CHARGE
CSA	CONFIGURATION STATUS ACCOUNTING
CSMP	CURRENT SHIP'S MAINTENANCE PROJECT
DDEC	DETROIT DIESEL ELECTRONIC CONTROL
DF	DIRECTION FINDER

GLOSSARY OF ACRONYMS

DRIS	DEFENSE REGIONAL INTERSERVICE SUPPORT
ECDIS	ELECTRONIC CHART DISPLAY & INFORMATION SYSTEM
ECP	ENGINEERING CHANGE PROPOSAL
EDM	ELECTRONIC DISPLAY MODULE
ELC	ENGINEERING LOGISTICS CENTER
ELT	ENFORCE LAWS AND TREATIES
EM	ELECTRICIANS MATE
EPO	ENGINEERING PETTY OFFICER
ESD	ELECTRONIC SUPPORT DETACHMENT
ESU	ELCTRONIC SUPPORT UNIT
FEA	FRONT END ANALYSIS
FCA	FUNCTIONAL CONFIGURATION AUDIT
GIB	GENERAL INFORMATION BOOK
GPH	GALLONS PER HOUR
GPS	GLOBAL POSITIONING SYSTEM
HM&E	"HULL, MECHANICAL AND ELECTRICAL"
HVAC	"HEATING, VENTILATION AND AIR CONDITIONING"
ISLMT	INTEGRATED LOGISTICS SUPPORT MANAGEMENT TEAM
ISC	INTEGRATED SUPPORT COMMAND
JQR	JOB QUALIFICATION REQUIREMENT
KW	KILOWATT
LLTM	LONG LEAD TIME MATERIAL
LOA	LENGTH OVERALL
MER	MARINE ENVIRONMENTAL RESPONSE

MICA	MANAGEMENT INFORMATION FOR CONFIGURATION ALLOWANCE
MLB	MOTOR LIFEBOAT
MLC	MAINTENANCE LOGISTICS COMMAND
MSG	MAINTENANCE SUPPORT GUIDE
MTBO	MEAN TIME BETWEEN OVERHAUL
MTL	MASTER TRAINING LIST
NESU	NAVAL ENGINEERING SUPPORT UNIT
NE-TIMS	NAVAL ENGINEERING-TECHNICAL INFORMATION MANAGEMENT SYSTEM
NMLBS	NATIONAL MOTOR LIFEBOAT SCHOOL
NSN	NATIONAL STOCK NUMBER
OGA	OTHER GOVERNMENT ACTIVITY
OINC	OFFICER IN CHARGE
OLSP	OPERATIONAL LOGISTICS SUPPORT PLAN
ORD	OPERATIONAL REQUIREMENTS DOCUMENT
OT&E	OPERATIONAL TEST AND EVALUATION
PCA	PHYSICAL CONFIGURATION AUDIT
PHS&T	"PACKAGING, HANDLING STORAGE AND TRANSPORTATION"
PMS	PREVENTIVE MAINTENANCE SYSTEM
PPBES	"PLANNING, PROGRAMMING, BUDGETING AND EVALUATION SYSTEM"
PQS	PERSONNEL QUALIFICATION STANDARDS
PRO	PROJECT RESIDENT OFFICE
PSS	PORT SAFETY AND SECURITY
PTD	PROVISIONING TECHNICAL DOCUMENTATION
RBS	RECREATIONAL BOATING SAFETY
RTC	RESERVE TRAINING CENTER

GLOSSARY OF ACRONYMS

SAR	SEARCH AND RESCUE
SCAMP	SHIPBOARD COMPUTER AIDED MAINTENANCE PROGRAM
SF	SUPPLY FUND
SM&R	"SOURCE, MAINTENANCE AND RECOVERABILITY"
SMEF	SYSTEMS MANAGEMENT ENGINEERING FACILITIES
SOS	SOURCE OF SUPPLY
SSMEB	SHIP STRUCTURE AND MACHINERY ENGINEERING BOARD
SWBS	SHIPS WORK BREAKDOWN STRUCTURE
TM&LS	TEXTRON MARINE AND LAND SYSTEMS
TQC	TRAINING QUOTA MANAGEMENT CENTER
TSA	TRAINING SITUATIONAL ANALYSIS
USO	UNIFORM SUPPLY OPERATIONS
VDC	VOLTS DIRECT CURRENT
XPO	EXECUTIVE PETTY OFFICER

47' MOTOR LIFEBOAT (MLB)
BOAT CLASS MAINTENANCE PLAN
(BCMP)

SWBS	SYSTEM	COMPONENT	CYCLE	MAINTENANCE ACTION REQUIRED			PART NUMBER	USE/ POOL	REPAIR METHOD	STOCK AT
				UNIT	INTERMEDIATE	DEPOT				
	TWO YEAR AVAILABILITY ITEMS									
074	Weld Repairs	Hull	Cond.	None	Inspect/Repair	None	5456 Aluminum	N/A	Avail	N/A
110	External Structure	Haul Out	2 yr.	None	Haul Out/Inspect	None	N/A	N/A	Avail	N/A
110	Below Waterline	Hull Plating	Cond.	None	Repair	Renew	N/A	N/A	Avail	N/A
110	Above Waterline	Freeboard	Cond.	Inspect	Repair	Renew	N/A	N/A	Avail	N/A
110	Deck plating	Weather decks	Cond.	Inspect	Repair	Renew	N/A	N/A	Avail	N/A
123	Tanks & voids	Forepeak	2 yr.	Inspect	Air-Test/Repair	Renew	N/A	N/A	Avail,	N/A
123		DFM Tank	2 yr.	None	Clean/Insp/Repair	Renew	N/A	N/A	Avail	N/A
160	Strut	Port	2 yr	None	Inspect/Repair	Renew	2040-01-362-3020	N/A	Avail	ELC(02)
160		Stbd	2 yr	None	Inspect/Repair	Renew	2040-01-362-3019	N/A	Avail	ELC(02)
167	Structural closure	Watertight Doors	2 yr.	Inspect	Repair/Replace	Renew			Contract/ISO	ELC(02)
		Door, EB-OB					911-5060000-007			
		Door, SC-Weather					911-5060000-008			
		Door, SC-EB					911-5060000-011			
		Door, SC-ER					911-5060000-009			
		Door, SC-Aux Mach					911-5060000-010			
		Door, Aux Mach-FwdC					911-5060000-010			
167	Structural closure	Watertight Hatch	2 yr	Inspect	Repair	Renew		N/A	Contract/ISO	ELC(02)
		Hatch, #1 ER-LAZ					911-5060000-012			
		Hatch, #3&4, Fwd Dk					2040-01-F92-0292			
		Hatch, #5,6,7 Bouy BX					2040-01-F92-0291			
		Hatch, #13 Mn Dk-FC					2040-01-361-3064			
		Closure, Radar					2018A			
		Closure, Navigation					2070A			
171	Mast	Mast	2 yr.	Inspect	Repair/Renew	None	N/A	N/A	Contract/ISO	N/A
191	Bouyancy Units	Aft	2.yr.	None	Air Test/Repair	None	N/A	N/A	Avail	N/A
		Port	2 yr.	None	Air Test/Repair	None	N/A	N/A	Avail	N/A
		Stbd	2 yr.	None	Air Test/Repair	None	N/A	N/A	Avail	N/A

SWBS	SYSTEM	COMPONENT	CYCLE	MAINTENANCE ACTION REQUIRED			PART NUMBER	USE/ POOL	REPAIR METHOD	STOCK AT
				UNIT	INTERMEDIATE	DEPOT				
		Upper	2 yr.	None	Air Test/Repair	None	N/A	N/A	Avail	N/A
		Hand Rails	2 yr.	None	Air Test/Repair	None	N/A	N/A	Avail	N/A
192	Wt Compartment	Compartment	2 yr.	None	Sonic Test/Repair	None	N/A	N/A	Avail	N/A
241	Input Shaft Assy	Cardan Sh. Brngs	2 yr.	None	Inspect/Repair	Renew	3120-01-373-9094	02-Feb	Avail	ELC(02)
241		Cardan Shaft	2 yr.	None	Inspect/Repair	Renew	3040-01-366-5030	02-Feb	Avail	ELC(02)
241		Cardan Sh Cplng	2 yr.	None	Inspect/Repair	Renew	3040-01-361-3048	02-Feb	Avail	ELC(02)
							VKL3412-1640-11.5			
241		Cardan Shft Seal	2 yr.	None	Inspect/Repair	Renew	5330-01-366-3574	02-Feb	Avail	ELC(02)
242	Couplings	Half Shaft	2 yr.	None	Inspect/Repair	Renew	3040-01-366-4002	Feb-00	Avail	ELC(02)
242		Coupling, Drv Svr	2 yr.	None	Inspect/Repair	Renew	7306zSP019-08	Feb-00	Avail	ELC(02)
							3010-01-075-7680			
243	Propeller Shafting	Shafts	2 yr	None	Inspect/Repair	Renew	2010-01-361-1348	Feb-00	Avail	ELC(02)
	TWO YEAR AVAILABILITY ITEMS (cont.)									
244	Prop Shaft Bearing	Bearing-Stern	2 yr	None	Inspect/Renew	None	LIPS SP019-05	Feb-00	Avail	Group
							2.5" ID x 3.374/.377 OD x 5"			
							3120-01-365-9410			
244		Bearing-Strut	2 yr.	None	Inspect/Renew	None	LIPS SP019-07	Feb-00	Avail	Group
							2.5"ID x 3.374/.377 OD x 10"			
							3120-01-366-0506			
245	Propellers	Port Prop	2 yr.	None	Inspect/Repair	Renew	28"/4BL RH		Avail	Group
							2010-01-F92-0294			
245		Stbd Prop	2 yr.	None	Inspect/Repair	Renew	28"/4BL LH		Avail	Group
							2010-01-F92-0295			
261	Fuel Oil System	Root valves	2 yr.	None	Inspect/Repair	Renew			Avail	N/A
505	Seawater System	Duplex Strainer	2 yr.	None	Inspect/Repair	Renew	4730-01-033-1285	01-Jan	Avail	ELC(02)
505		Simplex Strainer	2 yr.	None	Inspect/Repair	Renew	4730-01-378-3425	01-Jan	Avail	ELC(02)
							ARG-1250			

				MAINTENANCE ACTION REQUIRED			PART	USE/	REPAIR	STOCK
SWBS	SYSTEM	COMPONENT	CYCLE	UNIT	INTERMEDIATE	DEPOT	NUMBER	POOL	METHOD	AT
505		Valve, 3"	2 yr.	None	Inspect/Repair	Renew	4820-01-382-8587	01-Jan	Avail	ELC(02)
		Butterfly					3815W-11-3600TT-C			
							ARG-1250			
505		Valve, 3"	2 yr.	None	Inspect/Repair	Renew	4820-01-024-3825	Jan-00	Avail	ELC(02)
		Butterfly					Model#: 1861			
505		Valve, ½" Ball	2 yr.	None	Inspect/Repair	Renew	SS-45S8	Jan-00	Small Purchase	N/A
505		Valve, ¾" Ball	2 yr.	None	Inspect/Repair	Renew	SS-45S12	Jan-00	Small Purchase	N/A
							ARG-1250			
562	Rudders	Rudder Assy	2 yr	None	Inspect/Repair	Renew	2040-01-362-3817	0/2	Avail	ELC(02)
							47MLB 561-020-01			
562	Rudders	Rudder Bearing	2 yr	None	Inspect/Repair	Renew	3110-01-375-8749	0/2	Avail	ELC(02)
		Bearing, lower				(01 BRG to fabricate Upper & Lower)				
		Bearing, upper								
562		Arms	2 yr	None	Inspect/Repair	Renew	0/2		Avail	ELC(02)
562		Stop (Port/Stbd)	2 yr	None	Inspect/Repair	Renew	0/2		Avail	ELC(02)
562		Tube	2 yr.	None	Inspect/Repair	Renew		N/A	Avail	ELC(02)
562		Shaft seal	2 yr.	None	Inspect/Repair	Renew	5330-01-365-6453	N/A	Avail	ELC(02)
625	Outfit & Furnishing	Windows	2 yr.	None	Inspect/Repair	Renew			Contract/ISO	ELC(02)
		Wndw, Stbd, Fwd, Side					2090-01-361-8968			
		Wndw, Port, Fwd, Otbd					2090-01-361-3061			
		Wndw, Aft, Encl Br					2090-01-362-3572			
		Wndw, Survivors Cmpt					2090-01-361-8967			
		Wndw, Port, Fwd, Side					2090-01-361-1351			
		Wndw, Stbd, Ctr, Side					2090-01-361-4033			
		Wndw, Port, Ctr, Side					2090-01-361-4035			
		Wndw, Stbd, Aft, Hngd					2090-01-361-4034			
		Wndw, Port, Aft, Hngd					2090-01-361-8966			
		Wndw, Stbd, Fwd, Inbd					2090-01-361-1352			
		Wndw, Port, Fwd, Inbd					2090-01-361-3062			
		Wndw, Stbd, Fwd, Otbd					2090-01-361-4036			

SWBS	SYSTEM	COMPONENT	CYCLE	MAINTENANCE ACTION REQUIRED			PART NUMBER	USE/ POOL	REPAIR METHOD	STOCK AT
				UNIT	INTERMEDIATE	DEPOT				
	TWO YEAR AVAILABILITY ITEMS (cont.)									
625	Emer. Window Release		2 yr.	None	Inspect/Repair	Renew	47MLB 625-030		Contract/ISO	ELC(02)
		Window, Emerg. Rel.					SSR-12-1			
		Valve, Control					MAV-2			
		Valve, Solenoid					ET 2-12			
		Sensor, Sensatron					Custom#147			
		Compressor, Air					4303K11			
		Valve, tank air					1X361			
633	Cathodic Protection	Hull Zincs	2 yr.	None	Inspect/Renew	None	TRC 26	N/A	Avail.	N/A
							5340-01-381-0840			
		Shaft Zincs	2 yr.	None	Inspect/Renew	None	X 11	N/A	Avail.	N/A
							5340-01-366-3891			
634	Deck covering	Non-skid pads	2 yr.	Inspect/Repair	Renew	None	N/A	N/A	Avail	N/A
634	Deck covering	Dielectric Matting	2 yr.	Inspect/Repair	Renew	None	N/A	N/A	Avail	N/A
634	Exterior Paint	Coating System (InterSleek)	2 yr.	Inspect	Repair	Renew	N/A	N/A	Avail	N/A
							5340-01-366-3891			
634	Exterior Paint	Hull ID Markings	2 yr	Renew	None	None	N/A	N/A	S/F	N/A
	MISCELLANEOUS AVAILABILITY ITEMS									
074	Weld Repairs	Hull	Cond.	Inspect	Repair	None	5086 Aluminum	N/A	Contract/ISO	N/A
110	Internal structure	Structure Elements	Cond.	Inspect	Repair	Renew	N/A	N/A	Contract/ISO	N/A
110		Framing & blkhd	Cond.	Inspect	Repair	Renew	N/A	N/A	Contract/ISO	N/A
110		Bilges	Cond.	Inspect	Repair	Renew	N/A	N/A	Contract/ISO	N/A
110		Grating	Cond.	Inspect	Repair	Renew	N/A	N/A	Small Purchase	N/A
110	External Structure	Underwater body	Cond.	Inspect	Repair	Renew	N/A	N/A	Contract/ISO	N/A
110	Below waterline	Hull plating	Cond.	Inspect	Repair	Renew	N/A	N/A	Contract/ISO	N/A
110		Underwater body &	3 Mo.	Clean/Insp/Dive	Funding	None	N/A	N/A	Small Purchase	N/A

				MAINTENANCE ACTION REQUIRED			PART	USE/	REPAIR	STOCK
SWBS	SYSTEM	COMPONENT	CYCLE	UNIT	INTERMEDIATE	DEPOT	NUMBER	POOL	METHOD	AT
110		Underwater body	1 yr	Haulout/Inspect	None	None	N/A	N/A	Contract/ISO	N/A
110	Above waterline	Freeboard	Cond.	Inspect	Repair	None	N/A	N/A	Contract/ISO	N/A
110		Deck plating	Cond.	Inspect	Repair	Renew	N/A	N/A	Contract/ISO	N/A
110		Pilothouse-O/Bridge	Cond.	Inspect	Repair	Renew	N/A	N/A	Contract/ISO	N/A
123	Tanks & voids	DFM Tank	1 yr.	None	Clean/Insp	Repair	N/A	N/A	Contract/ISO	N/A
123		Forepeak	1 yr.	Clean/Inspect	Repair	Renew	N/A	N/A	S/F	N/A
167	Structural closure	Watertight Doors	Cond.	Inspect	Repair/Replace	Renew			Contract/ISO	ELC(02)
		Door, EB-OB					911-5060000-007			
		Door, SC-Weather					911-5060000-008			
		Door, SC-EB					911-5060000-011			
		Door, SC-ER					911-5060000-009			
		Door, SC-Aux Mach					911-5060000-010			
		Door, Aux Mach-FwdC					911-5060000-010			
167	Structural closure	Watertight Hatches	Cond.	Inspect	Repair/Replace	Renew		N/A	Contract/ISO	ELC(02)
		Hatch, #1 ER-LAZ					911-5060000-012			
		Hatch, #3&4, Fwd Dk					2040-01-F92-0292			
		Hatch, #5,6,7 BouyBx					2040-01-F92-0291			
		Hatch, #13 Mn Dk-FC					2040-01-361-3064			
		Closure, Radar					2018A			
		Closure, Navigation					2070A			
167	Structural closure	Watertight Doors	6 yr.	Inspect	Repair/Replace	Renew			Contract/ISO	ELC(02)
		Door, EB-OB					911-5060000-007			
		Door, SC-Weather					911-5060000-008			
		Door, SC-EB					911-5060000-011			
		Door, SC-ER					911-5060000-009			
		Door, SC-Aux Mach					911-5060000-010			
		Door, Aux Mach-FwdC					911-5060000-010			
167	Structural closure	Watertight Hatches	6 yr	Inspect	Repair/Replace	Renew		N/A	Contract/ISO	ELC(02)
		Hatch, #1 ER-LAZ					911-5060000-012			
		Hatch, #3&4, Fwd Dk					2040-01-F92-0292			
		Hatch, #5,6,7 BouyBx					2040-01-F92-0291			
		Hatch, #13 Mn Dk-FC					2040-01-361-3064			
		Closure, Radar					2018A			
		Closure, Navigation					2070A			

SWBS	SYSTEM	COMPONENT	CYCLE	MAINTENANCE ACTION REQUIRED			PART	USE/	REPAIR	STOCK
				UNIT	INTERMEDIATE	DEPOT	NUMBER	POOL	METHOD	AT
	MISCELLANEOUS AVAILABILITY ITEMS									
171	Mast	Mast	Cond.	Inspect	Repair	Renew	N/A	N/A	Contract/ISO	N/A
180	Foundations	Equip Foundations	Cond.	Inspect	Repair	Renew	N/A	N/A	Contract/ISO	N/A
191	Bouyancy Units	Aft	1 yr	Inspect	Repair	Renew	N/A	N/A	Contract/ISO	N/A
		Port	1 yr	Inspect	Repair	Renew	N/A	N/A	Contract/ISO	N/A
		Stbd	1 yr	Inspect	Repair	Renew	N/A	N/A	Contract/ISO	N/A
		Upper	1 yr	Inspect	Repair	Renew	N/A	N/A	Contract/ISO	N/A
		Hand Rails	1 yr.	Inspect	Repair	Renew	N/A	N/A	Contract/ISO	N/A
230	Emergency Shutdown	Transfer Unit	1 yr	Inspect	Renew	None	2520-01-382-7057		S/F	Group
		Control Cable, 10ft	1 yr	Inspect	Renew	None	2990-01-382-7548		S/F	Group
		Control Cable, 22ft	1 yr	Inspect	Renew	None	2990-01-383-0880		S/F	Group
		Control Cable, 26ft	1 yr	Inspect	Renew	None	2990-01-382-9756		S/F	Group
		Control Cable, 28ft	1 yr	Inspect	Renew	None	2990-01-383-0890		S/F	Group
		Control Cable, 30ft	1 yr	Inspect	Renew	None	2990-01-383-0882		S/F	Group
233	MDE 6V-92TA DDEC III	Intermediate Repair	Cond.	Assist	Remove/Install	Repair			Req. Contract	Group
		Port Engine					7901-230-3-2			
		Stbd Engine					7901-230-3-1			
233		Central Overhaul	3K hr/	Assist	Remove/Install	Replace			Contract / ELC	ELC(02)
		Port Engine	Cond.				2815-01-442-4541			
		Stbd Engine	($-TBD)				2815-01-442-4549			
233		Turbocharger	Cond.	Remove/Install	Repair/Renew	None	2950-01-442-7286		Small Purchase	Group
233		Blower	Cond.	Remove/Install	Repair/Renew	None	2354026		Req. Contract	Group
233		Aftercooler	Cond.	Remove/Install	Repair/Renew	None	2930-01-266-4336		Small Purchase	Group
233			6 yr	Clean/Hydro	None				Avail.	Group
233		L/O Cooler	Cond.	Remove/Install	Repair/Renew	None	8547237		Small Purchase	Group
233			6 yr	Clean/Hydro	None				Avail.	Group
233		J/W Heat Exchanger	Cond.	Remove/Install	Repair/Renew	None	23501986		Purchase	Group

SWBS	SYSTEM	COMPONENT	CYCLE	MAINTENANCE ACTION REQUIRED			PART NUMBER	USE/ POOL	REPAIR METHOD	STOCK AT
				UNIT	INTERMEDIATE	DEPOT				
233			6 yr	Clean/Hydro	None				Avail.	
233		Exhaust Manifold	Cond.	Remove/Install	Repair/Renew	None			Small Purchase	Group
233		Exhaust Riser Port	Cond.	Remove/Install	Repair/Renew	None	2815-01-443-1887		Contract/ISO	ELC(02)
233		Cylinder heads	Cond.	Remove/Install	Repair/Renew	None	2815-01-141-8506		Req. Contract	Group
233		Starter motor	Cond.	Remove/Install	Repair/Renew	None	2920-01-371-4844		Req. Contract	Group
233		Attached pumps	Cond.	Remove/Install	Ovhl/Repair/Renew	None			Small Purchase	Group
		Fuel Oil Supply					2910-01-024-9238		Small Purchase	Group
		Raw Water					2930-00-793-6786		Small Purchase	Group
		Kit, Reconditng					5115396			
		Jacket Water					2930-01-354-9202		Small Purchase	Group
		Kit, Reconditng					4320-01-370-9303			
	MISCELLANEOUS AVAILABILITY ITEMS									
233		Attached pumps	Cond.	Remove/Install	Ovhl/Repair/Renew	None			Small Purchase	Group
		Lube Oil							Small Purchase	Group
		Scavenging Oil					4320-00-509-2727		Small Purchase	Group
233		Vib. dampner	Cond.	Remove/Install	Repair/Renew	None			Small Purchase	Group
233		Engine Mounts	Cond.	Remove/Install	Repair/Renew	None			Small Purchase	ELC(02)
		Aft Mount(RH)								
		Aft Mount(LH)								
		Fwd Mount								
233		Flex piping	Cond.	Remove/Install	Repair/Renew	None			Small Purchase	Group

SWBS	SYSTEM	COMPONENT	CYCLE	MAINTENANCE ACTION REQUIRED			PART NUMBER	USE/ POOL	REPAIR METHOD	STOCK AT
				UNIT	INTERMEDIATE	DEPOT				
233			5 yr	Renew					Small Purchase	Group
233		Flex hoses	Cond.	Remove/Install	Repair/Renew	None			Small Purchase	Group
233			5 yr	Renew					Small Purchase	Group
233		Exhaust Riser Stbd	Cond.	Remove/Install	Repair/Renew	None	2815-01-127-6841		Contract/ISO	ELC(02)
241	Input Shaft Assy	Cardan Shaft Brngs	3K hr.	None	Renew	None	3120-01-373-9094	Feb-00	S/F - Group	ELC(02)
241		Cardan Shaft Brngs	Cond.	Inspect	Renew	None	3120-01-373-9094	Feb-00	S/F - Group	Group
241		Cardan Shaft	Cond.	Inspect	Repair	Renew	3040-01-366-5030	Feb-00	S/F - Group	Group
241		Cardan Shaft CouplngCond.	Inspect	Repair	Renew	3040-01-361-3048	Feb-00	S/F - Group	Group	
							VKL3412-1640-11.5			
241		Cardan Shaft Seal	3K hr.	None	Renew	None	5330-01-366-3574	Feb-00	S/F - Group	ELC(02)
241		Cardan Shaft Seal	Cond.	Inspect	Renew	None	5330-01-366-3574	Feb-00	S/F - Group	Group
241	Reduction Gear	Reduction Gear	Cond.	Remove/Install	Repair	Renew	Reitjes Gears	Feb-00	Contract/ISO	ELC(02)
							WVS 234 UP/2.00:1			
							3010-01-F97-1006			
241		Reduction Gear	1 yr	Inspect	Repair	Renew		Feb-00	S/F - Group	ELC(02)
		Reduction Gear	10K Hrs	None	Inspect/Repair	Repair		Feb-00	S/F - Group	ELC(02
		(Major Inspect/Ovhl)								
241		Red. Gear Cooler	1 yr	Inspect	None	None	14 889-4 K2	Feb-00	S/F - Group	ELC(02)
							4420-01-F97-1009			
242	Clutches	Clutch pack	Cond.	Remove/Install	Renew	None			S/F - Group	ELC(02)
252	DDEC III, Electronic	Module, Engine Room	Cond.	Test/Remove/Install	Test/Repair	Renew	23517868	02-Feb	Req. Contract	ELC(02)
	Marine Controls						5999-01-GL3-5982			
252		Module, Control	Cond.	test/Remove/Install	Test/Repair	Renew	23517552	02-Feb	Req. Contract	ELC(02)
		Station Interface					5999-01-GL3-5983			

				MAINTENANCE ACTION REQUIRED			PART	USE/	REPAIR	STOCK
SWBS	SYSTEM	COMPONENT	CYCLE	UNIT	INTERMEDIATE	DEPOT	NUMBER	POOL	METHOD	AT
252		Electronic Gear	Cond.	Test/Remove/Install	Test/Repair	Renew	23519500	02-Feb	Req. Contract	ELC(02)
		Interface Actuator					5999-01-GL3-5984			
252		Electronic Display	Cond.	Test/Remove/Install	Test/Repair	Renew	23512574-A	02-Feb	Req. Contract	ELC(02)
		Module					5999-01-GL3-5985			
252		4-Button Cntl Panel	Cond.	Test/Remove/Install	Test/Repair	Renew	23519499	02-Feb	Req. Contract	ELC(02)
		w/Add-on Conn					5999-01-GL3-5986			
	MISCELLANEOUS AVAILABILITY ITEMS									
252		MBP Assy (Override	Cond.	Test/Remove/Install	Test/Repair	Renew	23517558	02-Feb	Req. Contract	ELC(02)
		Panel w/Backup sw)					5999-01-GL3-5987			
256	Seawater Cooling	Duplex Strainers	1 yr	Inspect/Repair	Renew	None	4730-01-033-1285	02-Feb	Avail	ELC(02)
256		Simplex Strainers	1 yr	Inspect/Repair	Renew	None	4730-01-378-1711	02-Feb	Avail	ELC(02)
259	Exhaust System	Silencer, 8" Wet	1 yr	Inspect	Repair/Renew	None			S/F - Group	ELC(02)
		Port (LH)					C96-113401			
		Starboard(RH)					C96-113502			
261	Fuel Oil System	Root valves	1 yr.	Inspect/Repair	Renew	None			S/F - Group	N/A
261		F/O Priming	1 yr.	Inspect/Repair	Renew	None	4320-00-986-5838		S/F - Group	N/A
261		Stripping pump	1 yr.	Inspect/Repair	Renew	None	33799-0000	0/1	S/F - Group	N/A
310	24VDC Generation	Battery Charger	Cond.	Inspect	Repair/Renew	None	A41-60-24VA1		S/F - Group	ELC(02)
311		Alternator	Cond.	Inspect	Repair/Renew	None	6115-01-370-9873		S/F - Group	Group
							7901-230-3-9			
							Motorola 70A24V			
		Voltage Regulator	Cond.	Inspect	Repair/Renew	None			S/F - Group	Group
313	12VDC Generation	Battery, 12VDC Strtg	Cond.	Inspect	Renew	None	6140-00-190-9828	Feb-00	S/F	Group
314	110 VAC Generation	110VAC Generator	Cond.	Remove/Install	Repair	Renew			Small Purchase	Group

				MAINTENANCE ACTION REQUIRED			PART	USE/	REPAIR	STOCK
SWBS	SYSTEM	COMPONENT	CYCLE	UNIT	INTERMEDIATE	DEPOT	NUMBER	POOL	METHOD	AT
314		110VAC Generator	1 yr.	Inspect	Repair	Renew			Small Purchase	Group
320	Power Distribution	Distribution Panels	1 yr	None	Thermographic Inspection			N/A	Group	N/A
320		24/28 VDC, Panel A	Cond.	None	Repair	Renew	47B MLB-301-040-001	N/A	Group	N/A
320		12 VDC, Panel B	Cond.	None	Repair	Renew	47B MLB-301-030-001	N/A	Group	N/A
320		120 VAC, NR1 Panel	Cond.	None	Repair	Renew	47B MLB-301-020-001	N/A	Group	N/A
320		110V AC (shore pwr)	Cond.	Repair	Renew	None			Group	Group
		Receptacle, sh pwr					M4100B12R			
		Plug, shore pwr					M4100C12R			
320		Isolation X-Former	Cond.	None	Repair	Renew	6120-01-102-4845		Group	ELC(02)
331	Lighting system	Various	Cond.	Repair	Renew	None		N/A	S/F	N/A
422	Nav aids	Lights	Cond.	Repair/Renew	None	None		N/A	S/F	N/A
436	Alarms	Various	Cond.	Repair	Renew	None		N/A	S/F - Group	N/A
437	Gauges & meters	Various	Cond.	Renew	None	None		N/A	S/F	N/A
437			1 yr	None	Check/Cal	None		N/A	Group	N/A
443	Signaling	Electric Horn	Cond.	Repair	Renew	None		N/A	Group	ELC(02)
503	Auxiliary Pumps	AC S/W Cooling pumps	1 yr.	Inspect	Repair/Renew	None	MS900T-20	Feb-00	Small Purchase	ELC(02)
	MISCELLANEOUS AVAILABILITY ITEMS									
505	Seawater System	Duplex Strainers	Cond.	Inspect/Repair	Renew	None	4730-01-033-1285	01-Jan	S/F - Group	ELC(02)
							72-44FH-AL			
505		Simplex Strainers	Cond.	Inspect/Repair	Renew	None	4730-01-378-3425	01-Jan	S/F - Group	ELC(02)
							ARG-1250			
505		Valve, 3" Butterfly	Cond.	Inspect/Repair	Renew	None	4820-01-382-8587	01-Jan	Contract/ISO	ELC(02)

SWBS	SYSTEM	COMPONENT	CYCLE	MAINTENANCE ACTION REQUIRED			PART	USE/	REPAIR	STOCK
				UNIT	INTERMEDIATE	DEPOT	NUMBER	POOL	METHOD	AT
							3815W-11-3600TT-C			
505		Valve, 3" Butterfly	Cond.	Inspect/Repair	Renew	None	4820-01-024-3825	Jan-00	Contract/ISO	ELC(02)
							Model#: 1861			
505		Valve, ½" Ball	Cond.	Inspect/Repair	Renew	None	SS-45S8	Jan-00	Small Purchase	N/A
505		Valve, ¾" Ball	Cond.	Inspect/Repair	Renew	None	SS-45S12	Jan-00	Small Purchase	N/A
505		Valve, 1-1/4" Gate	Cond.	Inspect/Repair	Renew	None	173107	Jan-00	Small Purchase	N/A
505	Piping Systems	Piping	Cond.	Repair	Renew	None		N/A	Contract/ISO	N/A
508	Insulation	Various	Cond.	Repair	Renew	None		N/A	Small Purchase	N/A
		(Pipe & Machinery)								
510		Ventilation Fans	Cond.	Repair	Renew	None	34739-0020	0/1	Small Purchase	Group
		(Frame 10 mounted)								
510		Ventilation Fans	Cond.	Repair	Renew	None	19A1864	0/1	Small Purchase	Group
		(Open Bridge Console)								
514	HVAC system	Air Conditioning Sys	Cond.	Repair	Renew	None	FMAC16R	N/A	Small Purchase	ELC(02)
514		Heating Element	Cond.	Repair	Renew	None	2KWHAU	N/A	Small Purchase	N/A
514		AC compressor	1 yr	Inspect	Repair/Renew	None	ACH1231U	N/A	Small Purchase	ELC(02)
514		Blower, A/C Unit	Cond.	Repair	Renew	None	4C445	N/A	Small Purchase	N/A
514		Digital Controls	Cond.	Repair	Renew	None	FMACDC242	N/A	Small Purchase	N/A
	Bilge System	24VDC Electric pumps	Cond.	Inspect/Renew	None	None	Rule, 2000-12		Small Purchase	N/A
529		24VDC Float switch	Cond.	Inspect/Renew	None	None	247-24		Small Purchase	N/A

				MAINTENANCE ACTION REQUIRED			PART	USE/	REPAIR	STOCK
SWBS	SYSTEM	COMPONENT	CYCLE	UNIT	INTERMEDIATE	DEPOT	NUMBER	POOL	METHOD	AT
540	Fuel Oil System	Filter, F/O Dual	Cond.	Inspect/Renew	None	None	5148023	N/A	Small Purchase	N/A
540		Fltr, Water Sepratr	Cond.	Inspect/Renew	None	None	B32002M	N/A	Small Purchase	N/A
							4330-01-293-6953			
540		Valve, ¾" Ball	Cond.	Inspect/Repair	Renew	None	5150-31-3600TT	Jan-00	Small Purchase	N/A
							4820-01-074-6924			
540		Valve, ½" Ball	Cond.	Inspect/Repair	Renew	None	SS-45S8	Jan-00	Small Purchase	N/A
540		Valve, Check ½"	Cond.	Inspect/Repair	Renew	None	SS-58SB	Jan-00	Small Purchase	N/A
							4820-01-031-6361			
555	Fire Fighting Sys	CO-2 Extinguisher	Cond.	Recharge	None	None		N/A	Small Purchase	N/A
555		CO-2 Extinguisher	5 yr	None	Hydro	None		N/A	Small Purchase	N/A
555		PKP Extinguisher	Cond.	Recharge	None	None		N/A	Small Purchase	N/A
555		PKP Extinguisher	5 yr	None	Hydro	None		N/A	Small Purchase	N/A
555		CO-2 System	1 yr.	Inspect	Repair	None		N/A	Small Purchase	N/A
555		CO-2 Bottles	Cond.	Recharge	None	None		N/A	Small Purchase	N/A
	MISCELLANEOUS AVAILABILITY ITEMS									
555		CO-2 Bottles	5 yr	None	Hydro	None		N/A	Small Purchase	N/A
555		Nitrogen Bottles	Cond.	Recharge	None	None		N/A	Small Purchase	N/A
555		Nitrogen Bottles	5 yr	None	Hydro	None		N/A	Small Purchase	N/A
560	Steering System	Helm Unit	Cond.	Inspect/Repair	Replace	None	HM1099	Jan-00	S/F	ELC(02)

				MAINTENANCE ACTION REQUIRED			PART	USE/	REPAIR	STOCK
SWBS	SYSTEM	COMPONENT	CYCLE	UNIT	INTERMEDIATE	DEPOT	NUMBER	POOL	METHOD	AT
560		Single Axis Joystick	Cond.	Inspect/Repair	Replace	None	HM1973	Jan-00	S/F	ELC(02)
560		Rudder Position	Cond.	Inspect/Repair	Replace	None	HM1096	Jan-00	S/F	ELC(02)
		Display Meter								
560		Rudder Position	Cond.	Inspect/Repair	Replace	None	HM1094	Jan-00	S/F	ELC(02)
		Reference Unit								
560		Reservoir, Filter/	Cond.	Inspect/Repair	Replace	None	HM1690	Jan-00	S/F	ELC(02)
		Cooler Assembly								
560		Steering Pump Assy	Cond.	Inspect/Repair	Replace	None	PPCW			
		(Clockwise)								
560		Steering Pump Assy	Cond.	Inspect/Repair	Replace	None	PPCCW			
		(Counter-Clockwise)								
560		Control, Electronic	Cond.	Inspect/Repair	Replace	None	HM-CE			
560		Push Button, Moment	Cond.	Inspect/Repair	Replace	None	HM-PB			
560		Servo Pwr Cylinder	Cond.	Inspect/Repair	Replace	None	HM1647			
		Rpr Kit, Servo Cyl	Cond.							
560		Valve, Bypass,	Cond.	Inspect/Repair	Replace	None	M8116824VDC			
		Solenoid operated								
560		Auto Pilot Pump	Cond.	Inspect/Repair	Replace	None	M81120			
560		Auto Pilot Interface	Cond.	Inspect/Repair	Replace	None	HM1232HF			
		Valve								
560		Tie Bar Assy	Cond.	Inspect/Repair	Replace	None	HM1154	Jan-00	Group	ELC(02)
		(Universal ball end)								
562	Rudders	Rudder Assy		Inspect	Repair	Renew	2040-01-362-3817	0/2	Avail	Group
562		Rudder Bearing	Cond.	Inspect	Repair	Renew	3110-01-375-8749	0/2	Avail	ELC(02)
		Bearing, lower								
		Bearing, upper								
562		Arms	Cond.	Inspect	Repair	Renew		0/2	Avail	Group
562		Stop	Cond.	Inspect	Repair	Renew		0/2	Avail	Group
562		Tube	Cond.	Inspect	Repair	Renew		N/A	Avail	Group

				MAINTENANCE ACTION REQUIRED			PART	USE/	REPAIR	STOCK
SWBS	SYSTEM	COMPONENT	CYCLE	UNIT	INTERMEDIATE	DEPOT	NUMBER	POOL	METHOD	AT
562		Packing/seal	Cond.	Inspect	Repair	Renew		N/A	Avail	Group
581	Towline Stowage	Towreel, Powered	Cond.	Inspect/Repair	Renew	None	X-2264	N/A	Avail.	ELC(02)
	MISCELLANEOUS AVAILABILITY ITEMS									
625	Outfit & Furnishing	Windows	1 yr.	Inspect/Repair	Renew	None			S/F - Group	ELC(02)
		Wndw, Stbd, Fwd, Side					2090-01-361-8968			
		Wndw, Port, Fwd, Otbd					2090-01-361-3061			
		Wndw, Aft, Encl Br					2090-01-362-3572			
		Wndw, Survivors Cmpt					2090-01-361-8967			
		Wndw, Port, Fwd, Side					2090-01-361-1351			
		Wndw, Stbd, Ctr, Side					2090-01-361-4033			
		Wndw, Port, Ctr, Side					2090-01-361-4035			
		Wndw, Stbd, Aft, Hngd					2090-01-361-4034			
		Wndw, Port, Aft, Hngd					2090-01-361-8966			
		Wndw, Stbd, Fwd, Inbd					2090-01-361-1352			
		Wndw, Port, Fwd, Inbd					2090-01-361-3062			
		Wndw, Stbd, Fwd, Otbd					2090-01-361-4036			
625	Outfit & Furnishing	Windows	Cond.	Inspect/Repair	Renew	None			S/F - Group	ELC(02)
		Wndw, Stbd, Fwd, Side					2090-01-361-8968			
		Wndw, Port, Fwd, Otbd					2090-01-361-3061			
		Wndw, Aft, Encl Br					2090-01-362-3572			
		Wndw, Survivors Cmpt					2090-01-361-8967			
		Wndw, Port, Fwd, Side					2090-01-361-1351			
		Wndw, Stbd, Ctr, Side					2090-01-361-4033			
		Wndw, Port, Ctr, Side					2090-01-361-4035			
		Wndw, Stbd, Aft, Hngd					2090-01-361-4034			
		Wndw, Port, Aft, Hngd					2090-01-361-8966			
		Wndw, Stbd, Fwd, Inbd					2090-01-361-1352			
		Wndw, Port, Fwd, Inbd					2090-01-361-3062			
		Wndw, Stbd, Fwd, Otbd					2090-01-361-4036			
625		Emer. Window Release	1 yr.	Inspect	Repair/Renew	None	47MLB 625-030		S/F - Group	ELC(02)
		Window, Emerg. Rel.					SSR-12-1		Small Purchase	
		Valve, Control					MAV-2		Small Purchase	
		Valve, Solenoid					ET 2-12		Small Purchase	
		Sensor, Sensatron					Custom#147		Small Purchase	
		Compressor, Air					4303K11		Small Purchase	
		Valve, tank air					1X361		Small Purchase	
		Wipers, Windshield							S/F - Group	ELC(02)
		Blower, Window					87171		Small Purchase	
		Pump, Washer					P15-24V		Small Purchase	

				MAINTENANCE ACTION REQUIRED			PART	USE/	REPAIR	STOCK
SWBS	SYSTEM	COMPONENT	CYCLE	UNIT	INTERMEDIATE	DEPOT	NUMBER	POOL	METHOD	AT
625		Emer. Window ReleaseCond.	Inspect	Repair/Renew	None	47MLB 625-030		S/F - Group	ELC(02)	
		Window, Emerg. Rel.					SR-12-1		Small Purchase	
		Valve, Control					MAV-2		Small Purchase	
		Valve, Solenoid					ET 2-12		Small Purchase	
		Sensor, Sensatron					Custom#147		Small Purchase	
		Compressor, Air					4303K11		Small Purchase	
		Valve, tank air					1X361		Small Purchase	
		Wipers, Windshield							S/F - Group	ELC(02)
		Blower, Window					87171		Small Purchase	
		Pump, Washer					P15-24V		Small Purchase	
634	Below Waterline	Coating System	Cond.	None	None	Renew	N/A	N/A	Contract/ISO	N/A
		(InterSleek System)								
634	Deck Covering	Non-skid pads	Cond.	Inspect/Repair	Renew	None	N/A	N/A	S/F	N/A
634		Dielectric Matting	Cond.	Inspect/Repair	Renew	None	N/A	N/A	S/F	N/A
635	Hull Insulation	Insulation	Cond.	Inspect/Repair	Renew	None	N/A	N/A	Small Purchase	N/A
	MISCELLANEOUS AVAILABILITY ITEMS									
635		Insulation	6 yr.	None	Inspect/Repair	Renew	N/A	N/A	Avail	N/A
641	Furnishings	Various	Cond.	Inspect/Repair	Renew	None		N/A	Small Purchase	N/A
		Various	6 yr	None	Inspect/Repair	Renew		N/A	Small Purchase	N/A
664	Salvage Pump	P-5 pump (1)	Cond.	Inspect/Repair	Renew	None	4320-01-326-5935	N/A	Small Purchase	Group
	TEN YEAR AVAILABILITY ITEMS									
079	Stability	Stability	10 yr	None	None	Schedule				
091	SSMEB	SSMEB	10 yr	None	None	Schedule				

47' MOTOR LIFEBOAT
MASTER TRAINING LIST (MTL)
LEAD AND FOLLOW-ON CREWS

RATE/RANK	COURSE NUMBER	COURSE TITLE	DURATION	TOTAL HOURS
		MLB SUPERVISOR COURSE		
		OPERATORS/ENGINEERS		
CO/OINC/XPO		CLASSROOM: (RFO, RISK		
ENG/GROUP OPS		ASSESSMENT, STAN TEAM		21.5 HOURS
		OPERATORS UNDERWAY:		10.0 HOURS
		(PILOTING, TOWING)		
CO/OINC/XPO		CLASSROOM: (PILOTING,		6.5 HOURS
ENG/GROUP OPS		MAN OVERBOARD, TOWING,		
		INSPECTION)		
		ENGINEERS UNDERWAY:		2.0 HOURS
		(FULL POWER TRIAL)		
CO/OINC/XPO		CLASSROOM: (SYSTEMS,		14.0 HOURS
ENG/GROUP OPS		INSPECTION, DIESEL ENGINE		
		MAINTENANCE PROGRAM (DEMP)		
		MLB BASIC COXSWAIN COURSE		
BM3/BMCM		SAFETY/SURVIVAL		4.3 HOURS
BM3/BMCM		ELECTRONICS		5.25 HOURS
BM3/BMCM		ENGINEERING		4.5 HOURS
BM3/BMCM		PILOTING AND NAVIGATION		14.0 HOURS
BM3/BMCM		TOWING		28.5 HOURS
BM3/BMCM		SEARCH PATTERNS		3.0 HOURS
BM3/BMCM		RESCUE AND ASSISTANCE		3.5 HOURS
BM3/BMCM		SURF OPERATIONS		8.25 HOURS
BM3/BMCM		PERSONNEL RETRIEVAL/		
		MAN OVERBOARD		4.0 HOURS
		MLB HEAVY WEATHER COXSWAIN COURSE		
BM2/BMCM		SAFETY AND SURVIVAL		4.3 HOURS
BM2/BMCM		ENGINEERING		4.5 HOURS
BM2/BMCM		HEAVY WEATHER TOWING		42.75 HOURS
BM2/BMCM		SURF OPERATIONS		19.75 HOURS
BM2/BMCM		PERSONNEL RETRIEVAL/		
		MAN OVERBOARD		4.0 HOURS
		CONTRACTOR FURNISHED BOAT MAINTENANCE MECHANICAL MODULE		
MK3/MKC		PREVENTIVE MAINTENANCE (PMS)		3.0 HOURS
MK3/MKC		CORRECTIVE MAINTENANCE		8.0 HOURS
MK3/MKC		MAIN PROPULSION ENGINE		20.0 HOURS
MK3/MKC		MARINE REDUCTION GEAR		6.0 HOURS

47' MOTOR LIFEBOAT
MASTER TRAINING LIST (MTL)
LEAD AND FOLLOW-ON CREWS

RATE/RANK	COURSE NUMBER	COURSE TITLE	DURATION	TOTAL HOURS
		CONTRACTOR FURNISHED BOAT MAINTENANCE ELECTRICAL/ELECTRONICS MODULE		
EM3/EMC		PREVENTIVE MAINTENANCE (PMS)		1.0 HOURS
EM3/EMC		CORRECTIVE MAINTENANCE		36.0 HOURS
		BOAT FAMILIARIZATION		
CO/OINC/XPO ENG/GROUP OPS		SMALL BOAT FAMILIARIZATION		5.0 HOURS
CO/OINC/XPO ENG/GROUP OPS		SMALL BOAT HANDLING		8.0 HOURS
		TRANSITION TRAINING		
ENG/COXSWAINS		VESSEL SYSTEMS (CLASSROOM)		
ENG/COXSWAINS		6V92TA DIESEL ENGINE		
ENG/COXSWAINS		REINJTES REDUCTION GEAR		
ENG/COXSWAINS		RAW WATER SYSTEM		
ENG/COXSWAINS		FUEL OIL SYSTEM		
ENG/COXSWAINS		HVAC		
ENG/COXSWAINS		CO2 FIRE SUPPRESSION		
ENG/COXSWAINS		ELECTRICAL SYSTEM		
		TOWING, MAN OVBD & HVY WX OPS CLASSROOM		
CREWMAN/COX'N		TOWING		
CREWMAN/COX'N		MAN OVERBOARD		
CREWMAN/COX'N		HEAVY WEATHER		
		VESSEL COMPONENT ID (DOCKSIDE)		
BOAT CREWS		TOWING (UNDERWAY) ASTERN/ALONGSIDE		
ENG/COXSWAINS		CASUALTY CONTROL (CLASSROOM)		
ENGINEERS		PRO-LINK DIAGNOSTIC READER/ EDM FAM & TROUBLESHOOTING		3
BOAT CREWS		MAN OVERBOARD (UNDERWAY)		
ENGINEERS		ENGINEERING PMS (DOCKIDE)		
ALL HANDS		TEAM COORDINATION TRAINING (TCT)		
BOAT CREWS		BASIC BOAT HANDLING (UNDERWAY)		2.0 HOURS